

Natural Resources Canada

2013-14

Report on Plans and Priorities

The Honourable Joe Oliver,
P.C., M.P.
Minister of Natural Resources

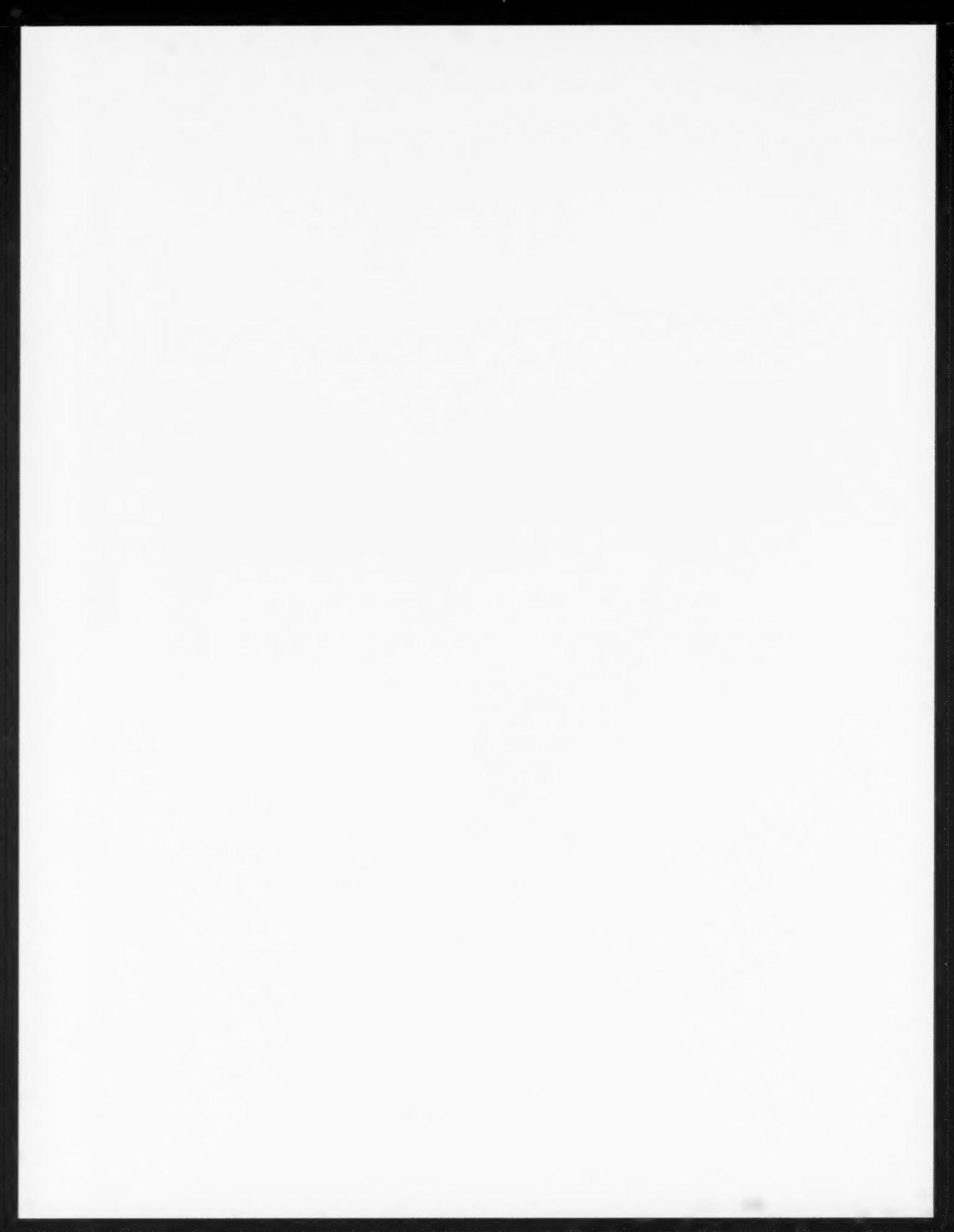
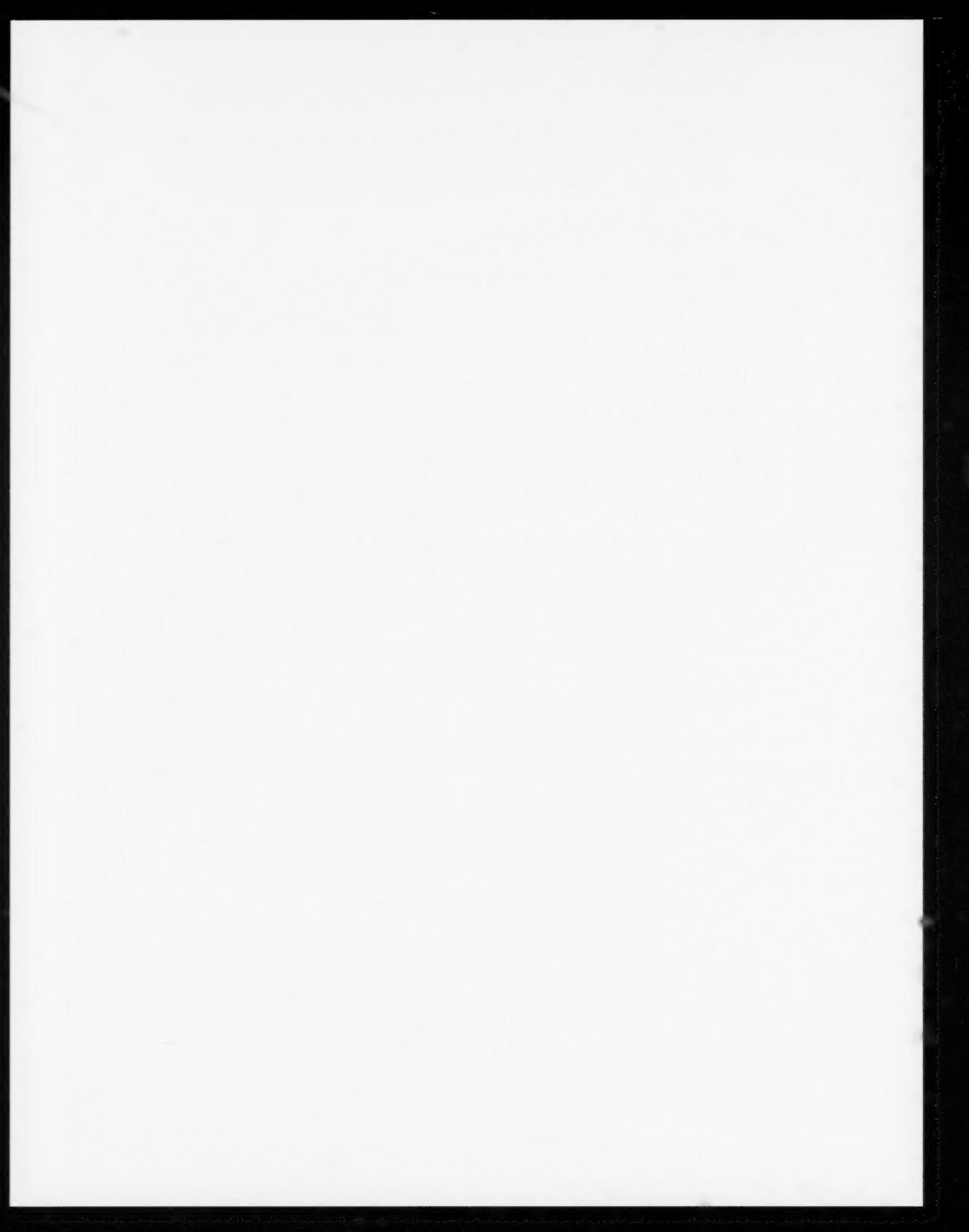




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Minister's Message

As Minister of Natural Resources, I am pleased to present the 2013-14 *Report on Plans and Priorities* for Natural Resources Canada (NRCan).

The natural resource sectors continue to underpin Canada's economy, and they remain the cornerstone of our future prosperity. Collectively, the energy, mining and forest sectors directly and indirectly account for more than 1.6 million jobs in communities across the country and support close to 20% of Canada's nominal gross domestic product.

Canada has an unprecedented opportunity: over the next 10 years, as much as \$650 billion could be invested in more than 600 major resource projects that are underway or planned in Canada. To capitalize on these opportunities, our Government's plan for *Responsible Resource Development* will ensure Canada's regulatory regime for major projects is among the most efficient, effective and competitive in the world. It will place beginning-to-end time limits on environmental assessments, eliminate unnecessary duplication, strengthen environmental protection and improve consultation with Aboriginal peoples. These changes will provide greater certainty for investors while strengthening Canada's world-class environmental standards.

Our nation's prosperity depends on expanding and diversifying markets for energy, mineral and forest products and innovative supporting technologies, particularly to fast-growing economies in the Asia-Pacific region. Accordingly, we are working with partners to support infrastructure development, reduce market access barriers, and brand Canada as a reliable and responsible supplier of resources.

Recognizing the fundamental importance of innovation to the productivity, environmental performance and competitiveness of the natural resource sectors, we will continue to advance new processes and technologies with partners in areas such as unconventional oil and gas, lightweight materials for transportation, green mining and energy efficiency.

To further the continued safety and security of Canada and Canadians, NRCan will also work with partners to prepare for and manage resource-related threats and emergencies, such as forest pests and forest fires, as well as natural hazards such as earthquakes.

We have a tremendous opportunity to capitalize on Canada's natural resources and their future potential. NRCan is working to help us seize this opportunity.



The Honourable Joc Oliver,
P.C., M.P.
Minister of Natural Resources

Section I: Organizational Overview

Raison d'être

NRCan's vision is to improve the quality of life of Canadians by creating a sustainable resource advantage. It seeks to achieve this vision by working to improve the competitiveness of the natural resource sectors and to grow their contribution to Canada's economy; by supporting the sustainable development of Canada's resources in a manner that advances the country's global standing as a leader on the environment; and by using its knowledge and expertise of Canada's landmass to support the safety and security of citizens.

Responsibilities

The Minister of Natural Resources is specifically responsible for or has responsibilities under more than 30 Acts of Parliament¹. The Minister's core powers, duties and functions are set forth in the Department of Natural Resources Act², the Resources and Technical Surveys Act³ and the Forestry Act⁴. NRCan also works in areas of shared responsibility with the provinces.

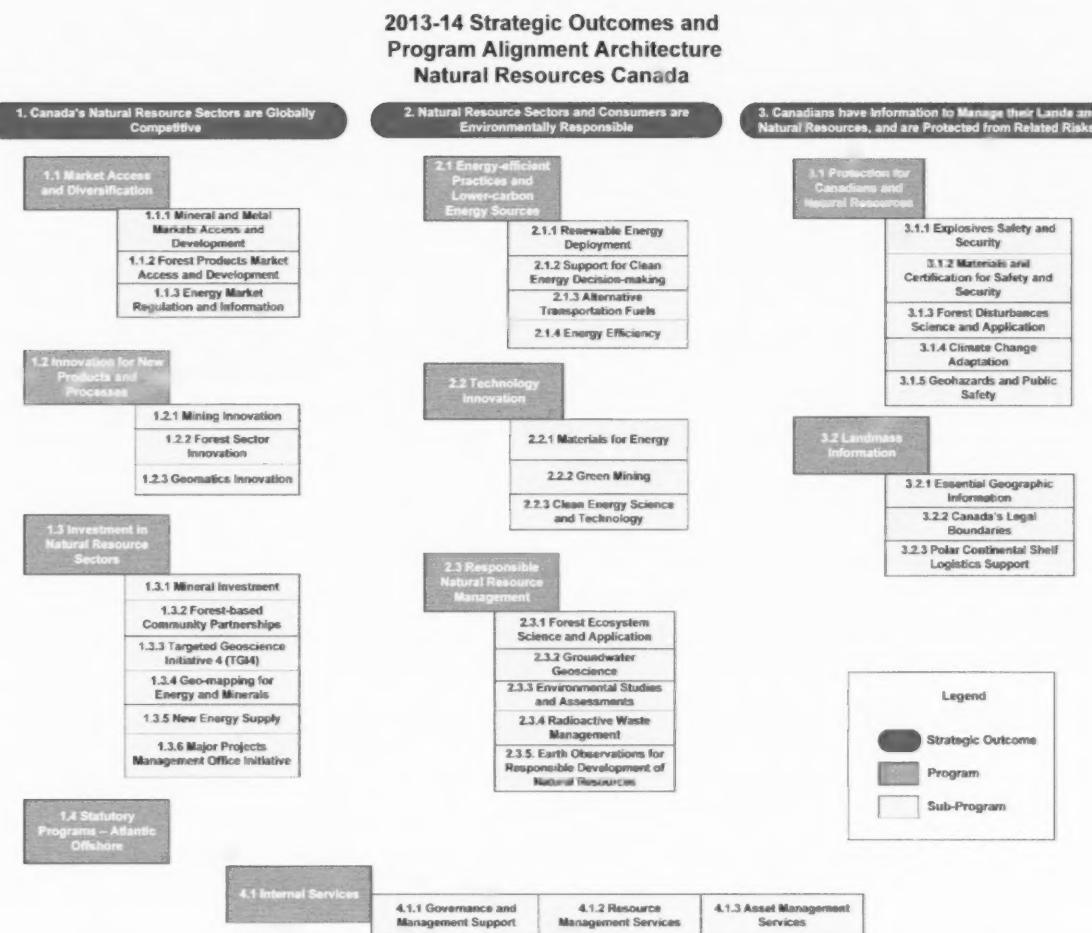
Within the Government of Canada, the Minister of Natural Resources also has responsibilities for the Natural Resources portfolio⁵, which includes:

- Atomic Energy of Canada Limited⁶ (AECL);
- National Energy Board⁷ (NEB);
- Canadian Nuclear Safety Commission⁸ (CNSC);
- Canada-Newfoundland and Labrador Offshore Petroleum Board⁹ (CNLOPB);
- Canada-Nova Scotia Offshore Petroleum Board¹⁰ (CNSOPB);
- Northern Pipeline Agency¹¹ (NPA),
- Sustainable Development Technology Canada¹² (SDTC), and
- Energy Supplies Allocation Board¹³ (ESAB) (inactive).

To deliver on its responsibilities, NRCan relies on a number of instruments. It uses science and technology (S&T) to help address priorities and plan for the future. It develops policies, programs, and regulations that help create a sustainable resource advantage, supporting strong, competitive natural resource sectors that are environmentally and socially responsible. And it uses partnerships and international collaboration to help drive progress on natural resource issues important to Canadians. More broadly, the Department plays a critical role in Canada's future, contributing to high-paying jobs, business investment and overall economic growth in Canada's natural resource sectors.

Strategic Outcomes and Program Alignment Architecture

The diagram below presents NRCAN's expected results and programs for 2013-14, commonly referred to as the Program Alignment Architecture. Through its programs, NRCAN supports the achievement of three Government of Canada outcomes: *Strong Economic Growth, A Clean and Healthy Environment, and A Safe and Secure Canada*. NRCAN's Program Alignment Architecture for 2013-14 showcases its contribution to Canada and Canadians and demonstrates how it will achieve its results.



Organizational Priorities

Last year, NRCan identified five priorities as critical to meeting its Strategic Outcomes and supporting the Government of Canada's priorities. These priorities have guided, and will continue to guide, the Department. NRCan's success in delivering on each priority will be assessed in the corresponding Departmental Performance Report. Details on each of the priorities and the plans for achieving them are presented below.

| | | |
|---|---|--|
| Expand markets and global partnerships | Type ¹⁴ : Previously Committed to: | PAA Linkages: Strategic Outcome 1 P 1.1 – Market Access and Diversification P 1.2 – Innovation for New Products and Processes |
| Why this is a priority | | |
| <p>Market access for natural resource products generates significant benefits to Canadians. With slower-than-anticipated economic growth and increasing domestic supply of oil and gas in the United States together with high demand for natural resources in fast-growing economies in the Asia-Pacific region, Canada must focus on expanding and diversifying its markets, for example by supporting the expansion of energy infrastructure, and on positioning itself as a reliable and responsible supplier worldwide.</p> | | |
| Plans for meeting the priority | | |
| <p>NRCan works to expand existing markets, open new markets, address market access barriers and promote investment in Canada as well as Canadian investment abroad by engaging with key foreign governments, both bilaterally and multilaterally. In 2013-14, NRCan will:</p> <ul style="list-style-type: none"> • Advance the Government's objective to enhance market access and diversify energy markets, including through international engagement, advocacy and communications to promote Canadian resources, address market barriers (e.g., European Union's Fuel Quality Directive) and brand Canada globally as a reliable and responsible resource developer. • Work bilaterally to expand natural resource markets and strengthen key partnerships with growing economies in the Asia-Pacific region, such as China, Japan, Korea and India, through mechanisms such as the Canada-China Joint Working Group on Energy and the Canada-India Energy Dialogue. NRCan will be negotiating a memorandum of understanding on oil and gas with the Planning Commission of the Government of India. • Pursue strategic bilateral engagement with the United States to strengthen the Canada-US energy relationship and advance Canada's interest (e.g., energy infrastructure), including through the Canada-US Energy Consultative Mechanism, the Clean Energy Dialogue and trilateral cooperation with the US and Mexico to reinforce North American energy security. • Provide support and funding to forest product associations and work with other governments to carry out market development activities in emerging markets and in North America in order to enhance the competitiveness of Canada's forest sector. • Implement the Government of Canada's Corporate Social Responsibility Strategy through partnerships with Foreign Affairs and International Trade Canada, the Canadian | | |

International Development Agency, the new Canadian International Institute for Extractive Industries and Development, and the Extractive Industries Transparency Initiative.

- Analyze international mineral resource policies, exchange on Canadian best practices in responsible mineral resource governance and manage activities related to the Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development and key bilateral mining relations.
- Ensure that Canada's trade objectives and perspectives are reflected in its trade negotiations with the European Union, Japan, India, South Korea, and the Trans-Pacific Partnership, among others.

| | | |
|--|-------------------------------------|--|
| Unlock resource potential through responsible development | Type: Previously Committed to | PAA Linkages: Strategic Outcomes 1, 2 & 3 P 1.1 - Market Access and Diversification P 1.3 – Investment in Natural Resource Sectors P 2.1 – Energy-efficient Practices and Lower-carbon Energy Sources P 2.3 – Responsible Natural Resource Management P 3.2 – Landmass Information |
|--|-------------------------------------|--|

Why this is a priority

The responsible development of Canada's natural resources is a critical contributor to our current and future prosperity. Over the next 10 years, planned investments of about \$650 billion in over 600 major energy, mining and forest sector projects across all regions will spur jobs and economic growth. Seizing this opportunity requires geoscience knowledge, investment, capital, energy and other infrastructure, an efficient and effective regulatory system, and meaningful consultation and engagement with Aboriginal peoples.

Plans for meeting the priority

To achieve this, NRCan will provide federal leadership by working with federal regulatory departments and agencies to implement the Government's plan for Responsible Resource Development, and will provide scientific knowledge necessary to understand and identify areas that hold the most resource development potential. In 2013-14, NRCan will:

- Implement the plan for Responsible Resource Development to advance system-wide transformation of the federal regulatory system, delivering predictable and timely project reviews, reducing regulatory burden, improving environmental protection, and providing for more consistent and meaningful Aboriginal consultations.
- Collaborate with provincial partners to improve the alignment of federal and provincial regulatory review processes for major projects.
- Provide project management and oversight of more than 60 major resource projects, including new energy infrastructure, to ensure timely and predictable reviews, and scientific and technical expertise to support environmental assessments under the *Canadian Environmental Assessment Act*.
- Work in close collaboration with partner departments, provinces and key stakeholders to strengthen pipeline and marine safety regimes.
- Complete formal agreements for the provision of the loan guarantee for the Lower

| | | |
|--|----------------------------------|--|
| Unlock resource potential through responsible development | Type: Previously Committed to | PAA Linkages: Strategic Outcomes 1, 2 & 3 P 1.1 - Market Access and Diversification P 1.3 - Investment in Natural Resource Sectors P 2.1 - Energy-efficient Practices and Lower-carbon Energy Sources P 2.3 - Responsible Natural Resource Management P 3.2 - Landmass Information |
| <p>Churchill River hydroelectric projects.</p> <ul style="list-style-type: none"> • Through the Targeted Geoscience Initiative 4 program, provide geoscience knowledge to support exploration, and deliver tools to help uncover deep hidden mineral deposits, including in the Ring of Fire area and rare earth element deposits in the Northwest Territories and Quebec. • Draw on the more than 600 publicly released geoscience maps and data sets generated through the Geo-mapping for Energy and Minerals (GEM) Program, which successfully completed its fifth year in 2012-13, to address priority location-based and theme-based geoscience issues that will help to unlock Canada's resource potential; release as many as 50 new geoscience maps and data sets. • Conduct nationally relevant forest ecosystems research, analysis and syntheses to better understand Canada's forest resource and provide science-based information on Canada's forest management practices to address domestic and international market requirements. • Finalize Canada's submission to the United Nations Convention on the Law of the Sea to extend the country's sovereign rights on the Atlantic and Arctic continental margins. • Work with provinces and territories to report to the Energy and Mines Ministers Conference on labour market imbalances in the natural resource sectors and best practices to address labour shortages. | | |

| | | |
|---|----------------------------------|---|
| Innovate for competitiveness and environmental performance | Type: Previously Committed to | PAA Linkages: Strategic Outcomes 1 & 2 P 1.1 - Market Access and Diversification P 1.2 - Innovation for New Products and Processes P 2.1 - Energy-efficient Practices and Lower-carbon Energy Sources P 2.2 - Technology Innovation P 2.3 - Responsible Natural Resource Management |
| <p>Why this is a priority Innovation is critical to both resource sector competitiveness and improved environmental performance, contributing to increased productivity, lower costs, value-added and new products, helping to meet environmental standards and regulations and maintain a social licence.</p> <p>Plans for meeting the priority NRCan will continue its work to enhance energy efficiency in the residential, commercial and institutional, industrial and transportation sectors, pursue S&T projects on unconventional oil and gas, promote the development and use of innovative energy technology, support the production and use of alternative transportation fuels, and advance innovation in green mining. In 2013-14, NRCan will:</p> | | |

| | | |
|---|---|---|
| Innovate for competitiveness and environmental performance | Type: Previously Committed to | PAA Linkages: Strategic Outcomes 1 & 2 P 1.1 – Market Access and Diversification P 1.2 – Innovation for New Products and Processes P 2.1 – Energy-efficient Practices and Lower-carbon Energy Sources P 2.2 – Technology Innovation P 2.3 – Responsible Natural Resource Management |
| <ul style="list-style-type: none"> • Contribute 17-22 petajoules of energy savings in Canada through the ecoENERGY Efficiency program. • Support Canada's alternative fuel production capacity for renewable alternatives to gasoline and diesel through ecoENERGY for Biofuels program. • Enhance international energy science and technology collaboration to address key issues facing the unconventional oil and gas sector for example through the implementation of the Canada-Israel Energy Science and Technology Fund. • Implement ecoENERGY Innovation Initiative projects with industry, academia and other government departments and agencies to research, develop and demonstrate innovative solutions to environmental challenges in the energy sector. • Advance Canada's energy and technology interests at environmental and climate change-related international fora (e.g., United Nations Framework Convention on Climate Change and the Clean Energy Ministerial process). • Advance projects to improve the efficiency and safety of oil pipelines using new material technologies developed or validated by NRCan. • Through programs including Investments in Forest Industry Transformation (IFIT), support the forest sector's efforts to be more energy efficient and generate more value from Canada's forests, assess the economic benefits of forest bioenergy and biorefining, and make targeted investments leading to non-traditional, high-value forest products and renewable energy. • Advance the restructuring of Atomic Energy of Canada Limited's (AECL) Nuclear Laboratories by launching a competitive procurement process to bring in private-sector rigour and efficiencies into the management of its facilities and services under a Government-Owned Contractor-Operator model. • Advance NRCan S&T signature projects, such as evaluating an innovative bitumen upgrading technology for potential commercialization, as part of a multi-year, multi-million dollar collaboration with the Japanese government and industry. • Improve the security of supply of medical isotopes by investing in the development of alternative technologies through the Isotope Technology Acceleration Program (ITAP) in support of AECL's ceasing production of technetium-99m by 2016. • Demonstrate key environmental technologies for green mining, including the feasibility of developing productive agricultural land uses on mine waste. • Present to industry stakeholders one advanced material technology to be implemented in new energy efficient vehicles produced in North America. • Support the production of about 16.9 terawatt-hours of clean electricity with the | | |

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|--|----------------------------------|---|
| Innovate for competitiveness and environmental performance | Type: Previously Committed to | PAA Linkages: Strategic Outcomes 1 & 2 P 1.1 – Market Access and Diversification P 1.2 – Innovation for New Products and Processes P 2.1 – Energy-efficient Practices and Lower-carbon Energy Sources P 2.2 – Technology Innovation P 2.3 – Responsible Natural Resource Management |
| ecoENERGY for Renewable Power and Wind Power Production Incentive programs. | | |

| | | |
|---|----------------------------------|---|
| Leverage S&T knowledge for safety and security risk management | Type: Previously Committed to | PAA Linkages: Strategic Outcomes 2 & 3 P 2.3 – Responsible Natural Resource Development P 3.1 – Protection for Canadians and Natural Resources P 3.2 – Landmass Information |
|---|----------------------------------|---|

Why this is a priority

NRCan has an important role in preparing for and managing threats and emergencies associated with natural and man-made hazards, including earthquakes, forest fires and industrial incidents. Furthermore, NRCan plays a key role in providing up-to-date information on our natural resources and landmass through Open Government, a whole-of-government initiative to ensure Canadians have easy access to the right information, in the right format, in a timely manner.

Plans for meeting the priority

Through collaboration with federal, provincial and territorial partners as well as academia, industry stakeholders and key international organizations, NRCan will continue to drive innovation of the Canadian Geospatial Data Infrastructure, ensuring that high-value, open, standards-based geodata, such as topographic and geoscience maps, are available to Canadians. The Department will also deliver reusable open data applications (e.g., Canadian digital elevation data, GeoGratis) and tools, leading to cost-effectiveness in technology use.

NRCan will also continue to prepare for and manage risks and emergencies as they relate to its mandate. In 2013-14, NRCan will:

- Acquire, integrate and disseminate geospatial and geoscience information to support land use management and emergency response, including digital mapping and elevation data and S&T publications.
- Implement tools for the assessment of earthquake risk at regional and national scales and upgrade national- and regional-scale seismic and Global Positioning Systems data to improve real-time earthquake and tsunami alerting.
- Deliver a national climate change Adaptation Platform to support knowledge exchange and tools for climate change adaptation for regions and resource sectors. For the forest sector in particular, develop an adaptation toolkit on sustainable forest management in a changing climate.
- Host the Conference of the International Boreal Forest Research Association, including discussions on boreal forest health issues across the circumboreal north.
- Provide remote sensing methods, tools and data for regulatory compliance monitoring and cumulative environmental impact assessment, including for the Alberta oil sands region.

| | | |
|--|----------------------------------|---|
| Leverage S&T knowledge for safety and security risk management | Type: Previously Committed to | PAA Linkages: Strategic Outcomes 2 & 3 P 2.3 – Responsible Natural Resource Development P 3.1 – Protection for Canadians and Natural Resources P 3.2 – Landmass Information |
| <ul style="list-style-type: none"> Conduct inspections on explosives safety and security and maintain a level of 70% of inspection reports on explosives that are rated satisfactory or better. | | |

| | | |
|---|----------------------------------|---|
| Increase the effectiveness and efficiency in NRCan operations | Type: Previously Committed to | PAA Linkages: P 4.1 – Internal Services |
| <p>Why this is a priority NRCan strives to serve Canadians in the most effective and efficient manner possible, ensuring value for money and delivering results. To support a well-managed, high-performing department and deliver internal services more efficiently, NRCan is transforming its business processes and use of technology.</p> <p>Plans for meeting the priority NRCan is focusing on key areas to identify opportunities and transform the way it works: it is working to optimize departmental efforts and resources, advance an enterprise approach and collaborate internally to improve efficiencies and results. As it implements the savings measures announced in Budget 2012, the Department will be working to ensure it is as efficient as possible in its operations through careful and deliberate planning. In 2013-14, NRCan will:</p> <ul style="list-style-type: none"> Implement the Common Human Resources Business Process Initiative to revitalize human resource services and systems through standardization of processes and tools. Adopt an enterprise-wide solution for electronic records and document management (GCDocs). Transform NRCan's web presence into a consolidated, smaller website that will offer Canadians more relevant, useful content; implement stronger governance and scheduled web content reviews. Implement the NRCan Values and Ethics Code, the 2012-15 Employment Equity Action Plan, and the 2011-2014 Official Languages Action Plan. Implement the 2013-14 to 2017-18 Investment Plan to ensure greater alignment of resources with priorities and identified risks, supported by sound governance. Through NRCan's Talent Management Strategy, enable all NRCan employees to maximize their contributions, focusing on leadership development, performance management and targeted learning for managers. | | |

Risk Analysis

As a large and diverse organization, NRCan prepares for and manages a wide range of risks. The Department's approach to risk management is outlined in its Integrated Risk Management Policy Framework, which is based on the recognition that a solid understanding of the risk environment is fundamental to achieving its Strategic Outcomes. High-level strategic and operational risks are presented in NRCan's Corporate Risk Profile (CRP), which is monitored and updated regularly. Risk identification is a key part of NRCan's planning process, and risks are important drivers in the establishment of priorities for the Department.

The Department's priorities respond to specific risks. In 2013-14, NRCan will be managing key risks to the natural resource sectors and Canadians on behalf of the Government of Canada.

Important risks include:

- adapting to shifting demand for natural resources, particularly energy, in traditional markets (US and European Union). To address this risk, NRCan places a high priority on efforts to diversify global markets for Canada's energy sector, specifically to fast-growing Asia-Pacific economies, supported by the Government's plan for Responsible Resource Development and other measures to enable timely and safe development of resources and related infrastructure.
- major industrial incidents, forest fires and earthquakes. The Department will continue to mitigate the impacts of these risks, supporting the safety and security of Canadians through timely and accessible information on Canada's natural resources and landmass to be used by the public and stakeholders to prepare for and respond to emergencies.
- operational risks associated with high-profile programs, (e.g., large grants and contributions programs) and an aging workforce and capital asset base. The Integrated Business Plan, the Talent Management Strategy and the Investment Plan, among others, help to minimize such risks.

NRCan will continue to ensure that its resources are allocated where most needed based on thorough risk assessment and comprehensive integrated planning. Implementation of Budget 2012 measures, including the reduction of NRCan's workforce, will continue to be done through careful, deliberate, integrated planning, while ensuring that employees are treated in an equitable, transparent and respectful manner.

Planning Summary

NRCan's Strategic Outcomes and Program Alignment Architecture (PAA) for 2013-14 showcase its contribution to Canada and Canadians and how it measures results. The financial information related to fiscal year 2013-14 is presented according to that year's PAA.

| NRCan Financial Resources (\$ thousands) | | | |
|--|-----------------------------|-----------------------------|-----------------------------|
| Main Estimates 2013-14 | Planned Spending 2013-14 | Planned Spending 2014-15 | Planned Spending 2015-16 |
| 2,767,014 | 2,767,784 | 2,316,896 | 2,056,759 |

| NRCan Human Resources (Full-Time Equivalents FTEs) | | |
|--|---------|---------|
| 2013-14 | 2014-15 | 2015-16 |
| 4,156 | 4,117 | 4,066 |

Planning summary table for Strategic Outcome 1: Canada's natural resource sectors are globally competitive

| 2013-14 Program | Actual Spending 2010-11 | Actual Spending 2011-12 | Forecast Spending 2012-13 | Planned Spending (\$ thousands) | | | <u>Alignment with Government of Canada Outcomes</u> ¹⁵ |
|---|-------------------------|-------------------------|---------------------------|---------------------------------|-----------|-----------|---|
| | | | | 2013-14 | 2014-15 | 2015-16 | |
| <u>Program 1.1</u> Market Access and Diversification | * | * | 55,428 | 44,913 | 42,764 | 41,801 | Strong economic growth |
| <u>Program 1.2</u> Innovation for New Products and Processes | * | * | 96,212 | 102,525 | 61,787 | 60,506 | Strong economic growth |
| <u>Program 1.3</u> Investment in Natural Resource Sectors | * | * | 80,447 | 54,484 | 48,508 | 42,008 | Strong economic growth |
| <u>Program 1.4</u> Statutory Programs – Atlantic Offshore** | * | * | 800,673 | 1,255,167 | 1,100,100 | 1,121,468 | Strong economic growth |
| Sub-Total | | | 1,032,760 | 1,457,089 | 1,253,159 | 1,265,783 | |

*Note: Actual Spending for 2010-11 and 2011-12

NRCan changed its Program Alignment Architecture (PAA) for 2012-13. Actual spending for 2010-11 and 2011-12 reflects the legacy PAA structure, for which there were two programs under Strategic Outcome 1 as opposed to the current four. Actual spending for Program 1.1 Economic Opportunities for Natural Resources was \$2,351,960,558 (includes the Statutory Programs related to the Atlantic Offshore of \$2,103,259,499) for 2010-11 and \$1,439,492,491 (includes the Statutory Programs related to the Atlantic Offshore of \$1,222,730,140) for 2011-12. Actual spending for Program 1.2 Natural Resource-based Communities was \$12,683,530 for 2010-11 and \$23,288 for 2011-12.

****Statutory Programs:**

As per the various Atlantic Offshore Accords, the Government of Canada receives royalties for offshore oil and gas production and subsequently pays an equal amount to the provinces of Nova Scotia and Newfoundland and Labrador.

Planning summary table for Strategic Outcome 2: Natural resource sectors and consumers are environmentally responsible

| 2013-14 Program | Actual Spending 2010-11 | Actual Spending 2011-12 | Forecast Spending 2012-13 | Planned Spending (\$ thousands) | | | <u>Alignment with Government of Canada Outcomes</u> ¹⁶ |
|---|-------------------------|-------------------------|---------------------------|---------------------------------|---------|---------|---|
| | | | | 2013-14 | 2014-15 | 2015-16 | |
| Program 2.1 Energy-efficient Practices and Lower-carbon Energy Sources | * | * | 354,416 | 444,318 | 464,096 | 255,697 | A clean and healthy environment |
| Program 2.2 Technology Innovation | * | * | 139,470 | 265,762 | 202,009 | 122,822 | A clean and healthy environment |
| Program 2.3 Responsible Natural Resource Management | * | * | 237,333 | 341,051 | 157,779 | 178,425 | A clean and healthy environment |
| Sub-Total | | | 731,219 | 1,051,131 | 823,885 | 556,945 | |

*Note: Actual Spending for 2010-11 and 2011-12

NRCan changed its Program Alignment Architecture (PAA) for 2012-13. Actual spending for 2010-11 and 2011-12 reflects the legacy PAA structure, for which there were two programs under Strategic Outcome 2 as opposed to the current three. Actual spending for Program 2.1 Clean Energy was \$1,329,561,608 for 2010-11 and \$1,323,313,646 for 2011-12. Actual spending for Program 2.2 Ecosystem Risk Management was \$198,295,951 for 2010-11 and \$199,083,001 for 2011-12.

Planning summary table for Strategic Outcome 3: Canadians have information to manage their lands and natural resources and are protected from related risks

| 2013-14 Program | Actual Spending 2010-11 | Actual Spending 2011-12 | Forecast Spending 2012-13 | Planned Spending (\$ thousands) | | | Alignment with Government of Canada Outcomes¹⁷ |
|--|--------------------------------|--------------------------------|----------------------------------|--|----------------|----------------|--|
| | | | | 2013-14 | 2014-15 | 2015-16 | |
| <u>Program 3.1</u> Protection for Canadians and Natural Resources | * | * | 65,381 | 59,202 | 58,051 | 55,829 | A clean and healthy environment |
| <u>Program 3.2</u> Landmass Information | * | * | 76,436 | 44,500 | 41,888 | 40,712 | A clean and healthy environment |
| Sub-Total | | | 141,817 | 103,702 | 99,140 | 95,679 | |

*Note: Actual Spending for 2010-11 and 2011-12

NRCAN changed its Program Alignment Architecture (PAA) for 2012-13. Actual spending for 2010-11 and 2011-12 reflects the legacy PAA structure, for which there were three programs under Strategic Outcome 3 as opposed to the current two. Actual spending for Program 3.1 Adapting to a Changing Climate and Hazard Risk Management was \$60,822,193 for 2010-11 and \$50,834,868 for 2011-12. Actual spending for Program 3.2 Natural Resource and Landmass Knowledge and Systems was \$95,524,071 for 2010-11 and \$87,235,443 for 2011-12. Actual spending for Program 3.3 Geomatics Canada Revolving Fund was -\$253,414 for 2010-11 and \$444,250 for 2011-12.

Planning summary table for Internal Services

| 2013-14 Program | Actual Spending 2010-11 | Actual Spending 2011-12 | Forecast Spending 2012-13 | Planned Spending (\$ thousands) | | |
|---|--------------------------------|--------------------------------|----------------------------------|--|----------------|----------------|
| | | | | 2013-14 | 2014-15 | 2015-16 |
| <u>Program 4.1</u> Internal Services | 308,434 | 251,746 | 204,313 | 155,862 | 139,913 | 137,490 |
| Sub-Total | 308,434 | 251,746 | 204,313 | 155,862 | 139,913 | 137,490 |

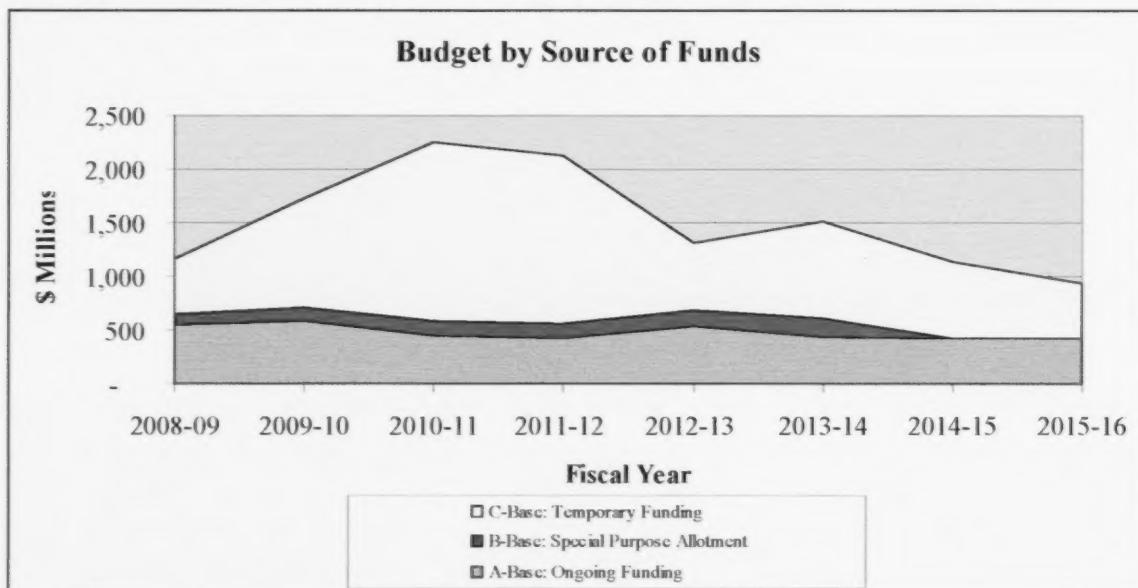
| Planning summary TOTAL for NRCan | | | | | | |
|--|-------------------------------|-------------------------------|---------------------------------|------------------------------------|-----------|-----------|
| Strategic Outcomes Programs, and Internal Services | Actual Spending 2010-11 | Actual Spending 2011-12 | Forecast Spending 2012-13 | Planned Spending (\$ thousands) | | |
| | | | | 2013-14 | 2014-15 | 2015-16 |
| TOTAL | 4,357,029 | 3,352,173 | 2,110,108 | 2,767,784 | 2,316,896 | 2,056,759 |

For more information on NRCan's plans and performance, please see the [NRCan plans and performance reports website¹⁸](#).

Expenditure Profile

Departmental Spending Trend

The graph below illustrates the departmental spending trend for the period 2008-09 to 2015-16 excluding statutory funding. Note that it does not include information from the 2013 Budget.



NRCan has four principal sources of funding:

- A-Base – permanent funding to the department;
- B-Base – funding to the department that is managed through a special purpose allotment;
- C-Base – funding that is temporary in nature (provided for a specific time period); and
- Statutory – funding that is provided directly as a result of legislative obligations.

NRCan's A-Base is holding at a fairly consistent level, although it has seen some reductions through both Strategic Review 2009 and Budget 2012 savings measures.

NRCan's B-Base is showing a downward trend as programs that are managed through special purpose allotments, such as the Nuclear Legacy Liabilities Program, are planned to wind down during 2013-14. However, NRCan recognizes that these programs may continue, which would level the B-Base spending trend over the period 2008-09 to 2015-16.

NRCan had a significant spike in C-Base funding during the period 2008-09 to 2011-12 resulting principally from programs announced as part of Canada's Economic Action Plan 2009, including the Pulp and Paper Green Transformation Program and the ecoENERGY Retrofit Homes grant program. As these programs have terminated, NRCan's spending trend for C-Base programs has declined. Additionally, as the department moves into 2013-14 and future years, other programs (such as Investments in Forest Industry Transformation and the Clean Energy Fund) are scheduled to sunset and other programs (such as ecoENERGY for Biofuels) have declining funding profiles.

NRCan's statutory payments are primarily associated with the offshore agreements between the Government of Canada and both the Province of Nova Scotia and the Province of Newfoundland and Labrador. As the majority of the statutory payments are related to revenue, the spending trend for statutory payments fluctuates depending on a number of factors such as production and pricing levels.

Information on year-to-year variations for the period 2012-13 to 2015-16 can be found in the table below, which provides details on fluctuations.

Program Funding

| Fiscal year | Programs (Note 1) | Funding Change (Note 2) |
|--------------------|---|-------------------------------------|
| 2012-13 | Pulp and Paper Green Transformation Program ¹⁹ | Sunset of program |
| | ecoENERGY Technology Initiative ²⁰ | Sunset of program |
| | Isotopes Supply Initiative ²¹ | Sunset of program |
| | Major Projects Management Office ²² | Sunset of program |
| | Transfer to Shared Services Canada (SSC) for the Administrative Services Review | Decrease in program funding profile |
| | ecoENERGY for Biofuels ²³ | Decrease in program funding profile |
| | CANMET Materials Technology Laboratory Relocation Program ²⁴ | Decrease in program funding profile |
| | Programs under the United Nations Convention on the Law of the Sea (UNCLOS) ²⁵ | Decrease in program funding profile |
| | Nuclear Legacy Liabilities Program ²⁶ | Increase in program funding profile |
| | Clean Energy Fund ²⁷ | Increase in program funding profile |

Program Funding

| Fiscal year | Programs (Note 1) | Funding Change (Note 2) |
|--------------------|--|-------------------------------------|
| 2012-13 | <u>ecoENERGY Innovation Initiative</u> ²⁸ | Increase in program funding profile |
| | <u>ecoENERGY Efficiency Program</u> ²⁹ | Increase in program funding profile |
| | <u>Sustainable Development Technology Canada – Next Generation Biofuels Fund</u> ³⁰ | Increase in program funding profile |
| | <u>Port Hope Area Initiative</u> ³¹ | Increase in program funding profile |
| 2013-14 | <u>Geo-mapping for Energy and Minerals Program</u> ³² | Sunset of program |
| | <u>Clean Energy Fund</u> ³³ | Decrease in program funding profile |
| | <u>ecoENERGY for Biofuels</u> ³⁴ | Decrease in program funding profile |
| | <u>Budget 2012 Savings Measures</u> | Decrease in program funding profile |
| | <u>Sustainable Development Technology Canada – Next Generation Biofuels Fund</u> ³⁵ | Decrease in program funding profile |
| | <u>ecoENERGY Renewable Power Initiative</u> ³⁶ | Decrease in program funding profile |
| | <u>Program of Energy Research and Development</u> ³⁷ | Decrease in program funding profile |
| | <u>ecoENERGY Innovation Initiative</u> ³⁸ | Decrease in program funding profile |
| | <u>Nuclear Legacy Liabilities Program</u> ³⁹ | Increase in program funding profile |
| | <u>Investments in Forest Industry Transformation Program</u> ⁴⁰ | Increase in program funding profile |
| | <u>Port Hope Area Initiative</u> ⁴¹ | New program |
| | <u>Forest Innovation and Expanding Market Opportunities Programs</u> ⁴² | New program |
| | <u>Satellite Station Facilities</u> ⁴³ | New program |
| | <u>Isotope Technology Acceleration Program</u> ⁴⁴ | New program |
| 2014-15 | <u>Responsible Resource Development Advertising Campaign</u> | New program |
| | <u>Major Projects Management Office</u> ⁴⁵ | Renewal program |
| | <u>Nuclear Legacy Liabilities Program</u> ⁴⁶ | Sunset of program |
| | <u>Investments in Forest Industry Transformation Program</u> ⁴⁷ | Sunset of program |
| | <u>Responsible Resource Development Advertising Campaign</u> | Sunset of program |

| Program Funding | | |
|---|---|-------------------------------------|
| Fiscal year | Programs (Note 1) | Funding Change (Note 2) |
| 2014-15 | Clean Energy Fund ⁴⁸ | Decrease in program funding profile |
| | ecoENERGY for Biofuels ⁴⁹ | Decrease in program funding profile |
| | Sustainable Development Technology Canada – Next Generation Biofuels Fund ⁵⁰ | Decrease in program funding profile |
| | Budget 2012 Savings Measures | Decrease in program funding profile |
| | Satellite Station Facilities ⁵¹ | Decrease in program funding profile |
| | CANMET Materials Technology Laboratory Relocation Program ⁵² | Decrease in program funding profile |
| | Isotope Technology Acceleration Program ⁵³ | Decrease in program funding profile |
| | Targeted Geoscience Initiative Phase 4 ⁵⁴ | Decrease in program funding profile |
| | Program of Energy Research and Development ⁵⁵ | Decrease in program funding profile |
| | Forest Innovation and Expanding Market Opportunities Programs ⁵⁶ | Decrease in program funding profile |
| 2015-16 | Port Hope Area Initiative ⁵⁷ | Increase in program funding profile |
| | Sustainable Development Technology Canada – Technology Fund ⁵⁸ | Increase in program funding profile |
| | Clean Energy Fund ⁵⁹ | Sunset of program |
| | Sustainable Development Technology Canada – Next Generation Biofuels Fund ⁶⁰ | Sunset of program |
| | Satellite Station Facilities ⁶¹ | Sunset of program |
| | Major Projects Management Office ⁶² | Sunset of program |
| | Targeted Geoscience Initiative Phase 4 ⁶³ | Sunset of program |
| | ecoENERGY for Biofuels ⁶⁴ | Decrease in program funding profile |
| | ecoENERGY Innovation Initiative ⁶⁵ | Decrease in program funding profile |
| | Sustainable Development Technology Canada – Technology Fund ⁶⁶ | Decrease in program funding profile |
| Wind Power Production Incentive ⁶⁷ | | Decrease in program funding profile |
| Climate Change Impacts and Adaptation ⁶⁸ | | Decrease in program funding profile |

| Program Funding | | |
|------------------------|---|-------------------------------------|
| Fiscal year | Programs (Note 1) | Funding Change (Note 2) |
| | Port Hope Area Initiative ⁶⁹ | Increase in program funding profile |

Note 1: Certain programs are divided in different phases and as one phase is completed another phase may start. For this reason, the same program may be listed as both sunsetting/decreasing or new/increasing.

Note 2: Funding change is as compared to the preceding year (e.g., Geo-mapping for Energy and Minerals Program sunsets March 31, 2013, so the sunsetting is reflected in 2013-14).

Estimates by Vote

For information on NRCan's organizational appropriations, see the *2013-14 Main Estimates*⁷⁰ publication.

Contribution to the Federal Sustainable Development Strategy

The Federal Sustainable Development Strategy (FSDS) outlines the Government of Canada's commitment to improving the transparency of environmental decision-making by articulating its key strategic environmental goals and targets. The Government will be consulting the public in 2013-14 regarding the second three-year cycle of the FSDS (2013-16). The FSDS 2013-16 will be finalized in 2013-14 and presented as part of year-end performance reporting for that year.

Sustainable development is central to the mandate of NRCan and essential to the future of the natural resource sectors and to the Canadian economy. The Department makes significant contributions to the FSDS. This is captured throughout this document and more specifically in NRCan's Departmental Sustainable Development Strategy. NRCan plays a key role in delivering on the Government's Clean Air Agenda⁷¹ by leading on the Clean Energy component, contributing to greenhouse gas emissions mitigation and air quality through Energy-efficient Practices and Lower-carbon Energy Sources as well as by participating in adaptation and international engagement efforts such as the Canada-US Clean Energy Dialogue⁷². In Budget 2011, the Government renewed its commitment to the Clean Air Agenda, as part of Canada's Economic Action Plan, with a focus on regulatory actions to achieve real emissions reductions while maintaining Canada's economic advantage.

More specifically, NRCan contributes to the following FSDS themes: I - Addressing Climate Change and Air Quality; II - Maintaining Water Quality and Availability; III - Protecting Nature, and; IV - Shrinking the Environmental Footprint – Beginning with Government, as denoted by the visual identifiers below.



Theme I
Addressing Climate Change
and Air Quality



Theme II
Maintaining Water Quality
and Availability



Theme III
Protecting Nature



Theme IV
Shrinking the Environmental Footprint
Beginning with Government

These contributions are components of most of the Department's Programs, outlined in sections II and III (Greening Government Operations



NRCan supports the goals of this theme, which are to reduce greenhouse gas emissions and mitigate the impacts of climate change as well as to minimize the threats to air quality so that the air Canadians breathe is clean and supports healthy ecosystems. NRCan contributes to GHG mitigation and air quality through Energy-efficient Practices and Lower-carbon Energy Sources (PAA 2.1), Technology Innovation (PAA 2.2), Responsible Natural Resource Management (PAA 2.3), Protection for Canadians and Natural Resources (3.1) Economic Opportunities for Natural Resources (PAA 1.1), and Innovation for New Products and Processes (PAA 1.2).



NRCan supports the goal to protect and enhance the quality of water so that it is clean, safe and secure for all Canadians and supports healthy ecosystems through activities under Responsible Natural Resources Management (PAA 2.3).



NRCan supports the goal to maintain productive and resilient ecosystems with the capacity to recover and adapt; and protect areas in ways that leave them unimpaired for present and future generations, through programming in Responsible Natural Resources Management (PAA 2.3) and Protection for Canadians and Natural Resources (PAA 3.2).



NRCan supports the goal to green government operations and minimize the environmental footprint of government operations through Energy-efficient Practices and lower-carbon energy sources, technology innovation and activities in our Internal Services (PAA 4.1), specifically via the Low Carbon NRCan Initiative.

supplementary table). Visit [NRCAN's website⁷³](#) for additional details on the Department's activities to support sustainable development.

Strategic Environmental Assessments

NRCAN also ensures that environmental concerns are considered in its decision-making through Strategic Environmental Assessments (SEAs). An analysis of the impacts on FSDS goals and targets is included in every proposal for policies, plans, or programs as part of the federal SEA process. The results of NRCAN's Detailed SEAs are made public when an initiative is announced, demonstrating the Department's commitment to achieving the FSDS goals and targets.

For complete details on the FSDS, see the [Environment Canada Sustainable Development website.⁷⁴](#)

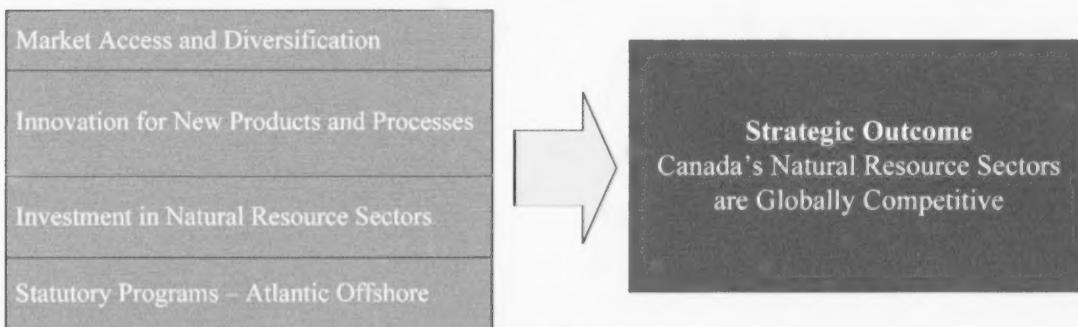
Section II: Analysis of Program by Strategic Outcome

This section provides information on programs that are critical to the realization of NRCAN's Strategic Outcomes and priorities for 2013-14. NRCAN monitors and tracks progress through quarterly reviews, which enables early detection of problem areas and, wherever possible, the implementation of corrective actions to deliver expected results in accordance with plans and budgets. NRCAN will use its updated performance indicators to improve performance management and decision-making, and provide more accurate and balanced performance information to Parliament and Canadians.

More information about these programs and initiatives, as well as supporting evidence from internal evaluations and audit reports, can be found on [NRCAN's website⁷⁵](#).

Strategic Outcome 1:

Canada's Natural Resource Sectors are Globally Competitive



The objective of this Strategic Outcome is to help Canada's natural resource sectors become more globally competitive by adapting to continuously changing conditions. This will be achieved by

supporting the natural resource sectors in expanding and diversifying their markets to respond to the high demand from emerging economies, and in diversifying their product offerings. Major activities to achieve this include:

- Increasing access to new and existing markets' and contributing to the reduction of trade barriers and ensuring that regulations are up to date;
- Encouraging natural resource sectors to adopt new technologies and processes so they can maximize productivity, develop new value-added products, and diversify markets;
- Encouraging investments in the natural resource sectors by decreasing the risk of development and increasing knowledge of opportunities; and
- Developing and implementing system-wide improvements to modernize the federal regulatory system for major resource projects.

NRCan also administers the statutory programs for the Atlantic Offshore Accords, which provide that the benefits of revenues from the offshore should flow to provinces as if the resources were on land. The revenues collected by the Receiver General for Canada are paid to Nova Scotia, and Newfoundland and Labrador.

NRCan's success in achieving this Strategic Outcome will be measured as follows:

| Performance Indicators ⁷⁶ | Targets |
|---|--------------------------|
| Canada's rank in trade as measured by Canada's Trade Performance Index (TPI) for wood, wood products and paper relative to all nations. | Favourable 10-year trend |
| Canada's rank in trade as measured by Trade Performance Index (TPI) for minerals (includes energy and power) relative to all nations. | Favourable 10-year trend |

For more information on NRCan's plans and performance, please see the [NRCan plans and performance reports website⁷⁷](#).

Program 1.1: Market Access and Diversification

Canada's natural resource sectors face two key barriers to market access and diversification: 1) trade and policy barriers, and 2) lack of awareness of Canada's natural resource products. The objectives of this program are to break down those barriers and support natural resource markets by making information available to Canadians, supporting negotiations to reduce trade barriers, and ensuring that regulations are up to date. This helps maintain natural resource sectors' access to existing markets and increases their access to new market segments.

What NRCan is trying to accomplish and how it measures success

| Expected Results | Performance Indicators | Targets | How it works |
|---|---|---|--|
| Natural resource sectors have increased access to existing markets | Natural resource sectors have access to markets as defined by domestic exports of energy products, minerals and metals products and forest products. | Meet or exceed baseline % market access (baseline to be established in 2013-14) | By measuring the levels of domestic exports of energy, minerals, metals, and forest products, NRCan will be able to assess the impact of its programs that are aimed at increasing exports and the overall health and competitiveness of the natural resource sectors. |
| Natural resource sectors have increased access to new market segments | Natural resource sectors have access to new market segments as defined by exports of energy products, minerals and metals products and forest products. | Meet or exceed baseline % access to new market segments (baseline to be established in 2013-14) | By measuring the levels of domestic exports of energy, minerals, metals, and forest products, NRCan will be able to assess the impact of its programs that are aimed at increasing exports and providing access to new market segments and the overall health and competitiveness of the natural resource sectors. |
| | \$ value of Canadian Direct Investment Abroad (CDIA) as a measure of investment in, and thus access to, foreign markets. | Favourable 10-year trend | |

Financial Resources (\$ thousands)

| Main Estimates 2013-14 | Planned Spending 2013-14 | Planned Spending 2014-15 | Planned Spending 2015-16 |
|---------------------------|-----------------------------|-----------------------------|-----------------------------|
| 44,913 | 44,913 | 42,764 | 41,801 |

Human Resources (FTEs)

| 2013-14 | 2014-15 | 2015-16 |
|---------|---------|---------|
| 233 | 225 | 210 |

Planning Highlights

Canada's natural resource products and technologies are a source of wealth and employment for Canadians and contribute to Canada's exports. To ensure Canada realizes its full natural resource potential, it must maintain and diversify access to markets for its natural resource industries. Partnerships and bilateral and multilateral trade agreements in the mining, forest and energy sectors will support these industries in accessing new markets and maintaining existing ones.

NRCAN will also work to maintain its long-established relationships with key trading partners and will continue to engage domestic partners in the articulation of Canada's approach to the management of energy and forest resources. It will also continue to engage in multilateral processes and negotiations that have strong potential to impact Canada's current and future trade opportunities.

Commitments for 2013-14: Work bilaterally to expand natural resource markets and strengthen key partnerships with growing economies in the Asia-Pacific region, such as China, Japan, Korea and India, through mechanisms such as the Canada-China Joint Working Group on Energy and the Canada-India Energy Dialogue. NRCAN will be negotiating a memorandum of understanding on oil and gas with the Planning Commission of the Government of India.

Pursue strategic bilateral engagement with the United States to strengthen the Canada-US energy relationship and advance Canada's interest (e.g., energy infrastructure), including through the Canada-US Energy Consultative Mechanism, the Clean Energy Dialogue and trilateral cooperation with the US and Mexico to reinforce North American energy security.

Advance the Government's objective to enhance market access and diversify energy markets, including through international engagement, advocacy and communications to promote Canadian resources, address market barriers (e.g., European Union's Fuel Quality Directive) and brand Canada globally as a reliable and responsible resource developer.

Leverage multilateral fora to engage key partners and promote market access for Canada's natural resources and technologies, for example, through the Asia-Pacific Economic Cooperation or the International Energy Agency.

Provide recommendations to the Minister or other government departments supporting the identification, assessment, and monitoring of metals and minerals – rare earth elements and other materials – which could be, or could become, critical to Canada's economy and security.

Implement phase two of a new high-security system for rapidly issuing Canadian Kimberley Process rough diamond export certificates in remote locations and facilitate market access for Canada's diamond industry.

Provide support and funding to forest product associations and work with other governments to carry out market development activities in emerging markets and in North America in order to enhance the competitiveness of Canada's forest sector.

Ensure that Canada's trade objectives and perspectives are reflected in its trade negotiations with the European Union, Japan, India, South Korea, and the Trans-Pacific Partnership, among others.

As part of its work to improve the framework for Canada's nuclear industry in moving towards a more efficient management model, the Department will continue to examine the future of Atomic Energy of Canada Limited's (AECL) Nuclear Laboratories, including its mandate, governance and management structure. In doing so, it will continue to work in partnership with other government departments and external advisors, and engage closely with stakeholders (private industry, universities and provinces).

Commitments for 2013-14: Advance the restructuring of Atomic Energy of Canada Limited's (AECL) Nuclear Laboratories by launching a competitive procurement process to bring in private-sector rigour and efficiencies into the management of its facilities and services under a Government-Owned Contractor-Operator model.

Links with the Federal Sustainable Development Strategy (FSDS)

NRCan's activities under Program 1.1 Market Access and Diversification provide support to Theme I (Clean Air) of the FSDS by participating in key international negotiations to reduce emissions from deforestation and forest degradation.

Program 1.2: Innovation for New Products and Processes

Optimizing the use of Canada's natural resources and the processes by which they are developed would improve the productivity of the natural resource sectors and reduce Canada's dependency on the sale of traditional natural resource products. The objective of this program is twofold: to maximize productivity and to decrease Canada's dependency on the sale of traditional products by encouraging natural resource sectors to adopt new technologies and processes to develop new products. This objective is achieved by conducting science, research, development, and demonstrations on new applications, technologies, processes, and products.

What NRCan is trying to accomplish and how it measures success

| Expected Results | Performance Indicators | Targets | How it works |
|--|---|--------------------------|---|
| Natural Resource sectors increase production of new products and processes | Number of new products and processes resulting from NRCan information. | 5 (annual) | NRCan undertakes and funds research activities to develop new products and processes, and disseminates this knowledge through various information channels. Measuring the uptake of this information and its use for new products and processes will enable the Department to assess the direct impact of its programs. By developing and offering new products and processes, the natural resource sectors will remain competitive in the long term. |
| | Research and development (R&D) expenditures in natural resource sectors as defined by total intramural R&D expenditures in energy, mining and forest sectors. | Favourable 10-year trend | NRCan undertakes R&D activities to develop new products and processes in the energy, mining and forest sectors. Measuring the trend in expenditures will enable the Department to measure and compare the level of R&D expenditures and activities over time. |

| What NRCan is trying to accomplish and how it measures success | | | |
|---|--|------------|---|
| Expected Results | Performance Indicators | Targets | How it works |
| Public and private sector organizations have increased either cost-efficiency or productivity | Number of citations of either cost-efficiency or productivity gains in public or private sector organizations. | 5 (annual) | NRCan provides integrated geomatics and geoscience information and tools with a view to increasing the efficiency and productivity of private sector organizations. By measuring the number of citations related to these two topics, the Department will be able to assess the impact of its programs and evaluate the uptake of its knowledge products. |

| Financial Resources (\$ thousands) | | | |
|------------------------------------|-----------------------------|-----------------------------|-----------------------------|
| Main Estimates 2013-14 | Planned Spending 2013-14 | Planned Spending 2014-15 | Planned Spending 2015-16 |
| 102,525 | 102,525 | 61,787 | 60,506 |

| Human Resources (FTEs) | | |
|------------------------|---------|---------|
| 2013-14 | 2014-15 | 2015-16 |
| 279 | 269 | 269 |

Planning Highlights

Canadian mining companies face increasing competition. Innovation and productivity will be key to ensuring their longer-term competitiveness. To that end, NRCan works with industry partners to conduct research on new technologies and processes that will enhance efficiencies while ensuring the safety and security of mine workers.

Commitments for 2013-14: Conduct one demonstration project of an innovative new technology in back fill of underground mine openings.

NRCan also supports the forest sector's global competitiveness by encouraging the development of new processes and products to increase productivity and decrease dependency on exports of traditional products. Through research, development and deployment, NRCan is supporting the sector's transformation from one based on traditional volume-driven commodities to one based on new value-added products and technologies. Using partnerships with other governments, industry and research institutions, the Department helps these stakeholders to work together to identify and advance common priorities.

Commitments for 2013-14: Provide advice to industry and policy makers on optimizing the value of forest fibre along the full value chain.

Through programs including Investments in Forest Industry Transformation (IFIT), support the forest sector's efforts to be more energy efficient and generate more value from Canada's forests, assess the economic benefits of forest bioenergy and biorefining, and

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make targeted investments leading to non-traditional, high-value forest products and renewable energy.

Finally, with the emergence of mass-market distribution systems (e.g., mobile devices) that have dramatically increased the demand for location-based data and technology, NRCan is working to facilitate the standardization and relevance of geographic information systems and other location-based information by delivering architecture, standards, policies, guidelines and expertise. The objective is to enable the natural resource sectors to create innovative and value-added applications.

Commitments for 2013-14: Deliver reusable open data applications (e.g., Canadian digital elevation data, GeoGratis API) and tools to support the Federal Committee on Geomatics and Earth Observation, collaborative data frameworks (i.e. federal geospatial platform) as well as other applications leading to cost-effectiveness in technology use.

Provide simulated data, application methods and expertise to create efficiencies in areas such as monitoring ice flow or forecasting agricultural management strategies based on data collected from advanced satellite missions.

Links with the Federal Sustainable Development Strategy (FSDS)

NRCan's activities under Program 1.2 Innovation for New Products and Processes provide support to Theme I (Clean Air) of the FSDS by supporting the development and adoption of clean energy technologies in the forest sector, including the development of new bioproducts, bioenergy and next-generation wood products.

Program 1.3: Investment in Natural Resource Sectors

Investing in the development of natural resources is costly and risky due to the uncertainties related to the potential economic viability of natural resources. There are many factors to consider when deciding whether or not to develop a natural resource – such as investors and/or companies lack knowledge on, and thus being unaware of, potential opportunities, or regulatory delays and uncertainty impeding the investment climate. The objective of this program is to encourage natural resource sector investment by either decreasing the risk of development, or increasing knowledge on opportunities. This objective is achieved by advancing federal system-wide regulatory improvements and providing funding and information on the factors that determine the potential economic viability of natural resources.

What NRCan is trying to accomplish and how it measures success

| Expected Results | Performance Indicator | Target | How it works |
|---|-----------------------|---------------------------|---|
| Natural resource sectors have increased | Growth of capital | The average 5-year growth | New capital investments are related to the health and competitiveness of the natural resource |

| What NRCAN is trying to accomplish and how it measures success | | | |
|---|--|--|---|
| Expected Results | Performance Indicator | Target | How it works |
| investment | expenditures in the energy sector (average of past 5 years) compared to growth in overall capital expenditures in Canada (average of past 5 years) | rate of capital expenditures in the energy sector grows at a rate higher than the average 5-year growth rate in capital expenditures in Canada | sectors and the development of natural resources. As NRCAN's programs are aimed at facilitating investments in the energy sector, this measure will enable the Department to assess the effectiveness of its program. |
| | Growth of capital expenditures in the forest sector (average of past 5 years) compared to growth in overall capital expenditures in Canada (average of past 5 years). | The average 5-year growth rate of capital expenditures in the forest sector grows at a rate higher than the average 5-year growth rate in capital expenditures in Canada | New capital investments are related to the health and competitiveness of the natural resource sectors and the development of natural resources. As NRCAN's programs are aimed at facilitating investments in the forest sector, this measure will enable the Department to assess the effectiveness of its program. |
| | Growth of capital expenditures in the minerals and metals sector (average of past 5 years) compared to growth in overall capital expenditures in Canada (average of past 5 years). | The average 5-year growth rate of capital expenditures in the mineral and metals sector grows at a rate higher than the average 5-year growth rate in capital expenditures in Canada | New capital investments are related to the health and competitiveness of the natural resource sectors and the development of natural resources. As NRCAN's programs are aimed at facilitating investments in the minerals and mines sector, this measure will enable the Department to assess the effectiveness of its program. |

| Financial Resources (\$ thousands) | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| Main Estimates 2013-14 | Planned Spending 2013-14 | Planned Spending 2014-15 | Planned Spending 2015-16 |
| 54,484 | 54,484 | 48,508 | 42,008 |

| Human Resources (FTEs) | | |
|------------------------|---------|---------|
| 2013-14 | 2014-15 | 2015-16 |
| 432 | 430 | 405 |

Planning Highlights

NRCan continues to provide leadership to improve the efficiency and effectiveness of the federal regulatory system and facilitate investment in major resource projects. Modernizing Canada's regulatory system will ensure more predictable and timely project reviews, reduce duplication for project reviews, strengthen environmental protection, and enhance consultations with Aboriginal communities. Through interdepartmental collaboration, NRCan also ensures timely, high-quality reviews of major resource projects.

Commitments for 2013-14: Implement the plan for Responsible Resource Development to advance system-wide transformation of the federal regulatory system, delivering predictable and timely project reviews, reducing regulatory burden, improving environmental protection, and providing for consistency, accountability, meaningfulness and timeliness of Aboriginal consultation.

Contribute to increasing Aboriginal participation in major resource projects by enhancing the consistency, accountability, meaningfulness and timeliness of Aboriginal consultation for major projects, and by participating in the Federal Framework for Aboriginal Economic Development and its funding program, the Strategic Partnerships Initiative.

Provide project management and oversight of more than 60 major resource projects, including new energy infrastructure, to ensure timely and predictable review, and scientific and technical expertise to support environmental assessments under the *Canadian Environmental Assessment Act*.

Work in close collaboration with partner departments, provinces and key stakeholders to strengthen pipeline and marine safety regimes.

Collaborate with provincial partners to improve the alignment of federal and provincial regulatory review processes for major projects.

NRCan works to attract investment in natural resources and reduces the risks of exploration by providing accessible and reliable geological knowledge and information. Targeting Canada's North, modern geological information is provided to communities and industry in order to facilitate strategic land-use and investment decision-making. Through the development of geological maps, optimal predictive models and deep exploration techniques, NRCan identifies potential new areas for undiscovered mineral or energy resources, thereby facilitating access to viable investment opportunities.

Commitments for 2013-14: Through the Targeted Geoscience Initiative 4 program, provide geoscience knowledge to support exploration, and deliver tools to help uncover deep hidden mineral deposits, including in the Ring of Fire area and rare earth element deposits in the Northwest Territories and Quebec.

Draw on the more than 600 publicly released geoscience maps and data sets generated through the Geo-mapping for Energy and Minerals (GEM) Program, which successfully completed its fifth year in 2012-13, to address priority location-based and theme-based geoscience issues that will help to unlock Canada's resource potential; release as many as 50 new geoscience maps and data sets.

Conduct two workshops with industry, provinces/territories and academia to disseminate reports and information focused on assessing fertile and infertile shale deposits and estimating Canada's northern offshore basins.

NRCAN is also a key player in promoting the Government of Canada's Corporate Social Responsibility Strategy to ensure that Canadian companies bring economic, social and environmental benefits to the communities in which they work, both at home and abroad. To this end, NRCAN supports developing countries by providing policy advice on their mining governance framework, working bilaterally or through international fora such as the Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development.

Commitments for 2013-14: Participate in major international trade shows to promote Canada as a destination for foreign direct investment, and publish documents supporting Canada's investment climate for mineral exploration and production such as a map of the Top 100 Exploration Projects, information bulletins on production and trade, and an inventory of Advanced Mineral Projects.

Analyze international mineral resource policies, exchange on Canadian best practices in responsible mineral resource governance, and manage activities related to the Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development and key bilateral mining relations.

Implement the Government of Canada's Corporate Social Responsibility Strategy through partnerships with Foreign Affairs and International Trade Canada, the Canadian International Development Agency, the new Canadian International Institute for Extractive Industries and Development, and the Extractive Industries Transparency Initiative.

NRCAN supports and facilitates Aboriginal community and regional-scale partnership projects focusing on the development of knowledge products and tools. The objective is to build capacity and provide viable opportunities to Aboriginal and forest-based communities to participate in and take advantage of employment and business opportunities in a transitioning forest sector. NRCAN also works with lead federal departments (Human Resources and Skills Development Canada, Aboriginal Affairs and Northern Development Canada, Citizenship and Immigration Canada), provincial and territorial counterparts to understand labour market challenges facing the natural resource sectors and to identify programs and best practices to address them.

Commitments for 2013-14: Implement 5 Aboriginal Forestry Initiative contribution agreements with Aboriginal Affairs and Northern Development Canada and other federal departments to help Aboriginal organizations and develop business opportunities.

Work with provinces and territories to report to the Energy and Mines Ministers Conference on labour market imbalances in the natural resource sectors and best practices to address labour shortages.

Program 1.4: Statutory Programs – Atlantic Offshore

This program is about monitoring and facilitating payment disbursal agreements and transfer payments under the Atlantic Offshore Accord Acts.

| What NRCAN is trying to accomplish and how it measures success | | | |
|--|---|---------------|---|
| Expected Results | Performance Indicator | Target | How it works |
| Statutory requirements relating to offshore petroleum payments in Nova Scotia and Newfoundland and Labrador are managed in a timely manner. | Percentage of offshore payments processed in a timely manner | (100%) | The Atlantic Offshore Accord Acts, managed by NRCAN, provide that an amount equal to the amount of revenues from offshore petroleum activities is to be transferred to provinces. |
| Statutory requirements relating to offshore petroleum payments in Nova Scotia and Newfoundland and Labrador are managed in an accurate manner. | Percentage of offshore payments processed in an accurate manner | (100%) | NRCAN processes these transfers in the time and manner prescribed in Regulations. |

| Financial Resources (\$ thousands) | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| Main Estimates 2013-14 | Planned Spending 2013-14 | Planned Spending 2014-15 | Planned Spending 2015-16 |
| 1,255,167 | 1,255,167 | 1,100,100 | 1,121,468 |

| Human Resources (FTEs) | | |
|-------------------------------|----------------|----------------|
| 2013-14 | 2014-15 | 2015-16 |
| 0 | 0 | 0 |

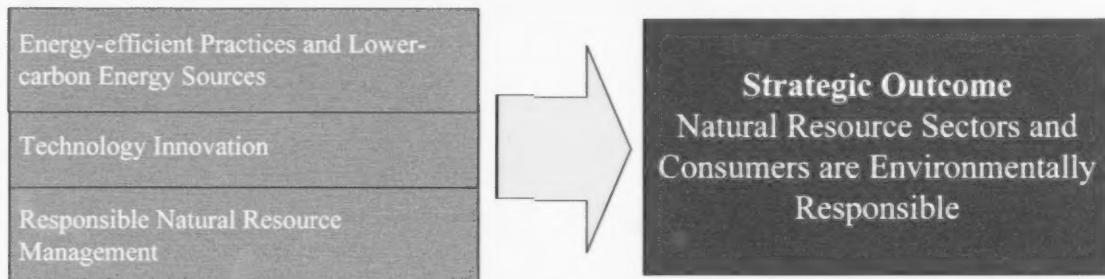
Planning Highlights

The Atlantic Offshore Accords provide that the benefits of revenues from offshore petroleum should flow to provinces as if the resource were on land. Revenues collected by the Receiver General for Canada are paid to the provinces of Nova Scotia, and Newfoundland and Labrador.

Commitments for 2013-14: Process offshore transfer payments to both Nova Scotia and Newfoundland and Labrador as required under the Atlantic Offshore Accord Acts in a timely and accurate manner.

Strategic Outcome 2:

Natural Resource Sectors and Consumers are Environmentally Responsible



Energy use and natural resource development can have negative impacts on land, water and air, which can affect the well-being of current and future generations. NRCan works to ensure that natural resources are developed and used in an environmentally responsible manner by:

- Encouraging and enabling energy consumers and producers to adopt cleaner and more efficient technologies, products, services and practices;
- Encouraging academia, industry and the public sector to research, develop and demonstrate innovative solutions to resource development and environmental implications; and
- Enabling government departments, regulatory bodies and industry to understand the risks to the environment, assess environmental impacts, and protect Canada's resources.

NRCan's success in achieving this Strategic Outcome will be measured as follows:

| Performance Indicators | Targets |
|---|---|
| Change in Canadian greenhouse gas (GHG) emissions | Canada's national target is a 17% reduction from 2005 levels by 2020. |
| Annual harvest of timber relative to the level of harvest deemed to be sustainable (Allowable Annual Cut – AAC) | Stay within the upper limit of the supply line (AAC) |

For more information on NRCan's plans and performance, please see the [NRCan plans and performance reports website⁷⁸](#).

Program 2.1: Energy-efficient Practices and Lower-carbon Energy Sources

Canada's energy markets are defined by consumption and production decisions; however, consumers and producers do not necessarily make decisions that minimize their impact on the environment due to several barriers including: 1) a lack of awareness of available options and their benefits, 2) insufficient capacity for adoption (e.g., regulatory frameworks, codes and standards) and 3) financial risk. The objective of this program is to address these barriers and encourage and enable energy consumers and producers to adopt cleaner and more efficient technologies, products, services and practices, thereby transforming the market. This objective is achieved through

education and outreach activities, targeted incentives, and regulatory interventions that keep pace with technological changes.

| What is NRCan trying to accomplish and how it measures success | | | |
|--|--|--|---|
| Expected Results | Performance Indicators | Targets | How it works |
| Energy consumers and producers adopt environmentally responsible products and practices related to energy use and production | Canada's total annual energy savings due to efficiency (difference between energy use without energy efficiency improvements and energy use with energy efficiency improvements; the units are petajoules [PJ]). | Favourable 5-year trend in PJ saved, as per 2006 baseline, now and ongoing | Energy savings can be achieved through consumption and production choices. Measuring the annual energy savings over 5 years will allow NRCan to assess the effectiveness and direct impacts of its energy efficiency programs that include education, outreach and legislation. |
| | Renewable electricity generation capacity in megawatts (MW) | Favourable 5-year trend in MW, as per 2007 baseline of 6,753 MW of installed capacity (excluding large hydro), now and ongoing | NRCan's programs support the production of renewable energy. By assessing the trend in megawatts of capacity, the Department will be able to measure the increase in renewable electricity generating capacity, which contributes to the reduction of GHG emissions. |
| | Biofuel production in Canada | Favourable 5-year trend, as per 2007 baseline, now and ongoing | NRCan's programs support domestic biofuel production capacity. By assessing the trend in biofuel production capacity, NRCan will be able to measure the effectiveness of its program. |

| Financial Resources (\$ thousands) | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| Main Estimates 2013-14 | Planned Spending 2013-14 | Planned Spending 2014-15 | Planned Spending 2015-16 |
| 444,318 | 444,318 | 464,096 | 255,697 |

| Human Resources (FTEs) | | |
|-------------------------------|----------------|----------------|
| 2013-14 | 2014-15 | 2015-16 |
| 319 | 319 | 316 |

Planning Highlights

NRCAN works to encourage energy efficiency, increase the availability of renewable energy, and diversify Canada's energy mix. Programs and initiatives focus on reducing GHG emissions from the natural resource sectors, increasing the production of low-impact renewable energy, and improving energy efficiency. NRCAN also works to advance the Government's commitment to support major new clean energy projects of national or regional significance.

Commitments for 2013-14: Advance Canada's energy and technology interests at environmental and climate change-related international fora (e.g., United Nations Framework Convention on Climate Change and the Clean Energy Ministerial process).

Support the production of about 16.9 terawatt-hours of clean electricity with the ecoENERGY for Renewable Power and Wind Power Production Incentive programs.

Complete formal agreements for the provision of the loan guarantee for the Lower Churchill River hydroelectric projects.

NRCAN works to encourage and enable energy consumers and producers to adopt more efficient products and practices. The ecoENERGY Efficiency program improves energy efficiency at home, at work and on the road. NRCAN efforts make the housing, building and equipment stock more energy-efficient, energy performance more visible, and industry and vehicle operations more efficient.

Furthermore, NRCAN supports the production of renewable alternatives to gasoline and diesel and encourages the development of a competitive domestic industry through the ecoENERGY for Biofuels program. NRCAN also supports the diversification of energy used in the transportation sector through education and outreach activities and codes and standards development for natural gas through the ecoENERGY for Alternative Fuels program.

Commitments for 2013-14: Contribute 17-22 petajoules of energy savings in Canada through the ecoENERGY Efficiency program.

Support, through the ecoENERGY Efficiency program, training sessions on energy efficient products and practices for 205,200 individuals in the transportation sector, 400 in the buildings sector, 500 in the housing sector, and 750 in the industrial sector.

Support Canada's alternative fuel production capacity for renewable alternatives to gasoline and diesel through the ecoENERGY for Biofuels program.

Through the ecoENERGY for Alternative Fuels programs, support two codes and standards committees within the Canadian Standards Association working on developing installation codes for natural gas refueling stations and natural gas vehicles.

Links with the Federal Sustainable Development Strategy (FSDS)

The activities under Program 2.1 Energy-efficient Practices and Lower-carbon Energy Sources provide significant support to Theme I (Clean Air) of the FSDS, specifically to Goal 1.1 to reduce greenhouse gas emissions, and contribute indirectly to Goal 1.2 to improve air quality. Key highlights of the contribution to these goals include:

- Improving energy efficiency in Canada through the provision of training, information, and tools on energy efficient products and practices in several target sectors (housing, buildings, equipment, industry, and transportation) as well as the enhancement of energy efficiency regulations.
- Supporting domestic production capacity of renewable fuels in support of Environment Canada's Renewable Fuels Regulations.
- Encouraging the development of a clean electricity system under the ecoENERGY for Renewable Power program, which is projected to result in the reduction of 6.0 to 6.7 megatonnes of carbon dioxide emissions.
- Participating in strategic international climate change negotiations and advancing clean energy priorities, particularly with the US.

Program 2.2: Technology Innovation

Solutions to the environmental challenges faced by the natural resource sectors require sustained efforts in research, development and demonstration because the current level of science and technology is inadequate to address these concerns. However, the natural resource sectors neither have all the necessary knowledge nor make the necessary investments in innovation due to the potential poor return on investment. The objective of this program is to encourage academia, industry and the public sector to research, develop and demonstrate innovative solutions to environmental challenges encountered in the natural resource sectors. This objective is achieved through the generation and dissemination of scientific knowledge, and the development and demonstration of new technologies.

What NRCan is trying to accomplish and how it measures success

| Expected Results | Performance Indicator | Target | How it works |
|--|---|---|--|
| Stakeholders invest in S&T to address environmental challenges | Dollar amount of stakeholder investments in S&T to address environmental challenges | 5% increase over 5 years (2005 baseline \$934 million), now and ongoing | NRCan conducts and provides funding for clean energy science and technology. Activities are undertaken in partnership with industry, academia and other governments to allow for risk and cost sharing, and to ensure that the research is relevant to the needs of the industry and other stakeholders. Measuring stakeholder investment will allow NRCan to assess the relevance of its research activities. |

| Financial Resources (\$ thousands) | | | |
|------------------------------------|-----------------------------|-----------------------------|-----------------------------|
| Main Estimates 2013-14 | Planned Spending 2013-14 | Planned Spending 2014-15 | Planned Spending 2015-16 |
| 265,762 | 265,762 | 202,009 | 122,822 |

| Human Resources (FTEs) | | |
|------------------------|---------|---------|
| 2013-14 | 2014-15 | 2015-16 |
| 622 | 617 | 611 |

Planning Highlights

Through research activities conducted mainly by NRCAN's CanmetENERGY laboratories and with funding from the Program of Energy and Research Development, Clean Energy Fund, ecoENERGY Innovation Initiative and the Isotope Technology Acceleration Program, NRCAN supports the research, development and demonstration of next-generation energy technologies and systems to advance energy supply and distribution technologies, including cleaner fossil fuel and electricity with carbon capture and storage, and improve energy efficiency within industry and among end users.

Commitments for 2013-14: Implement ecoENERGY Innovation Initiative projects with industry, academia and other government departments and agencies to research, develop and demonstrate innovative solutions to environmental challenges in the energy sector.

Manage approximately 90 contribution agreements in renewable energy research and development and demonstration in carbon capture and storage technology; energy from renewable sources, including bioenergy; energy efficiency in buildings and communities; electrification of transportation; and environmental aspects of oil sands development.

Enhance international energy science and technology collaboration to address key issues facing the unconventional oil and gas sector for example through the implementation of the Canada-Israel Energy Science and Technology Fund.

Advance NRCAN S&T signature projects, such as evaluating an innovative bitumen upgrading technology for potential commercialization, as part of a multi-year, multi-million dollar collaboration with the Japanese government and industry.

Improve the security of supply of medical isotopes by investing in the development of alternative technologies through the Isotope Technology Acceleration Program (ITAP) in support of AECL's ceasing production of technetium-99m by 2016.

NRCan's research, development and demonstration activities also support the Canadian automotive and oil and gas industries in increasing energy efficiency and safety in these sectors. The Department works closely with Canada's industry and academia to develop lightweight materials for the automotive sector, which will lead to vehicles that are stronger and lighter and therefore safer and more energy efficient and that will enable the use of clean energy sources such as electric and hybrid-electric vehicles. Research is also conducted on new materials for oil and gas pipelines to ensure their integrity and performance.

Commitments for 2013-14: Advance at least three projects to improve the efficiency and safety of oil pipelines using new material technologies developed or validated by NRCan.

Present to industry stakeholders one advanced material technology to be implemented in new energy efficient vehicles produced in North America.

Finally, through the Green Mining Initiative, NRCan works with partners to improve the mining sector's environmental performance and productivity, ultimately enhancing its competitiveness and reducing its impact on land, water and air. The Department conducts and supports research, development and demonstration of green mining technologies and processes, including footprint reduction, mine waste management, mine closure and rehabilitation, and ecosystem risk management.

Commitments for 2013-14: Demonstrate key environmental technologies for green mining, including the feasibility of developing productive agricultural land uses on mine waste.

Links with the Federal Sustainable Development Strategy (FSDS)

The activities under Program 2.2 Technology Innovation provide significant support to Theme 1 (Clean Air) of the FSDS, specifically to Goal 1.1 to reduce greenhouse gas emissions, and contribute indirectly to Goal 1.2 to improve air quality. In particular, NRCan is:

- Taking concrete actions to reduce GHG emissions and air pollutants by investing in clean energy research and development and demonstration (e.g., carbon capture and storage, Equilibrium Communities Initiative).
- Developing new high-temperature materials that can be used in fossil power and petrochemical systems to improve thermal efficiency and lower emissions, and new lightweight and structural materials for improved engine design and automotive applications with the goal of improving the efficiency of engine combustion as well as fuel efficiency.
- Supporting research on environmental technologies in the mining sector.

Program 2.3: Responsible Natural Resource Management

Greater knowledge of risks and environmentally responsible practices could help to prevent and reduce the environmental impacts of natural resource development. The objectives of the program are to enable government departments, regulatory bodies and industry to assess these impacts to the environment and to develop, monitor and maintain resources or clean up wastes responsibly.

These objectives are achieved through the provision of assessments and knowledge rooted in sound science, and waste management efforts in collaboration with provinces, federal agencies and municipalities.

| What NRCan is trying to accomplish and how it measures success | | | |
|---|---|---|--|
| Expected Results | Performance Indicators | Targets | How it works |
| Public and private sectors establish practices to mitigate the environmental impacts to natural resources | Number of public and private sector new/updated policies, regulations or other decision-making tools completed annually | 3 (annual) | Through its programs and activities, NRCan provides information on environmentally responsible practices and risks to the environment. The uptake of this information by public and private stakeholders shows that its use for environmental decision-making is based on science. |
| Federal Government implements waste management practices that meet modern standards for safety and environmental protection | Number of contaminated sites where the environmental impacts are reduced | 7 (by 2016) (specifically environmental impacts reduced at Whiteshell and Chalk River Laboratories, Glace Bay, Port Granby and Welcome waste management facilities, Port Hope and Northern Transportation Route sites | NRCan characterizes contaminated sites and develops clean-up strategies in cooperation with local stakeholders and implementing agencies. Clean-up approaches meet federal and provincial regulatory requirements including those of the Canadian Nuclear Safety Commission. |

| Financial Resources (\$ thousands) | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| Main Estimates 2013-14 | Planned Spending 2013-14 | Planned Spending 2014-15 | Planned Spending 2015-16 |
| 341,051 | 341,051 | 157,779 | 178,425 |

| Human Resources (FTEs) | | |
|-------------------------------|----------------|----------------|
| 2013-14 | 2014-15 | 2015-16 |
| 285 | 282 | 281 |

Planning Highlights

To prevent and reduce the environmental impacts of natural resource development, NRCan provides scientific and technical expertise to all federally triggered or regulated projects and reviews as required under the *Canadian Environmental Assessment Act*. The Department also provides guidance to other government departments and regulatory bodies and contributes to the provision of science, the development of guidelines and the identification of best practices to address the environmental impacts of metal mining, pipelines, oil sands and offshore energy development and transportation.

Commitments for 2013-14: Provide forest and geoscience information and timely expert advice that are scientific, technical and policy based for projects that require environmental assessments under the *Canadian Environmental Assessment Act*, including mining projects.

Conduct mineral and energy resource assessments to inform boundary decisions for the establishment of new national parks.

Provide remote sensing methods, tools and data for regulatory compliance monitoring and cumulative environmental impact assessment, including for the Alberta oil sands region.

The Department, in partnership with provinces, municipalities and the private sector, works to mitigate the risks of radioactive wastes to the environment and human health through the Radioactive Waste Management programs. The Nuclear Legacy Liabilities Program implements long-term management solutions to clean up radioactive waste or contaminated lands at AECL sites and the Historic Waste Program deals with low-level radioactive waste arising across Canada for which the original private sector producer no longer exists or cannot reasonably be held responsible, such as in Port Hope, Ontario.

Commitments for 2013-14: Issue a contract for the start of the construction of the Port Granby Long-Term Waste Management Facility.

Prepare for Phase III of the Nuclear Legacy Liabilities Program.

NRCan conducts research as well as national assessments and monitoring to develop, synthesize and integrate scientific knowledge of Canada's forest ecosystems. This knowledge supports the sustainability of forests. It is used by governments, industry and non-governmental organizations to develop sound forest management practices and policies, to meet international reporting obligations, to form Canada's negotiating positions on international environmental issues related to forests, and to promote a science-based understanding of Canada's forests and management practices.

Commitments for 2013-14: Produce forest-related carbon and greenhouse gas emission estimates to be used in Canada's 2014 greenhouse gas National Inventory Report.

Conduct nationally relevant forest ecosystems research, analysis and syntheses to better understand Canada's forest resource and provide science-based information on Canada's forest management practices to address domestic and international market requirements.

Host the Conference of the International Boreal Forest Research Association, including discussions on boreal forest health issues across the circumboreal north.

Finally, NRCan works with provincial and territorial partners to develop common standards, protocols and methods to assess and map Canada's key aquifers (underground water) and harmonize data and approaches between the different jurisdictions. This work will improve understanding of the extent of groundwater systems, their dynamics and vulnerability, and will provide a consistent and coordinated approach to groundwater management. This information will be disseminated through a national inventory to be used by urban planners, decision-makers and other levels of government.

Commitments for 2013-14: Complete standardized assessments and mapping of 7 interprovincial aquifers and update the Groundwater Information Network to ensure all information is available on-line.

Links with the Federal Sustainable Development Strategy (FSDS)

The activities under program 2.3 Responsible Natural Resource Management support Theme I (Clean Air), Theme II (Maintaining Water Quality and Availability), and Theme III (Protecting Nature) of the FSDS. NRCan is the lead on FSDS Target 7.3 (Sustainable Forest Management) to improve the management of Canada's forest ecosystems through the development and dissemination of knowledge, detailed further below. Other NRCan activities that support the FSDS under this program include:

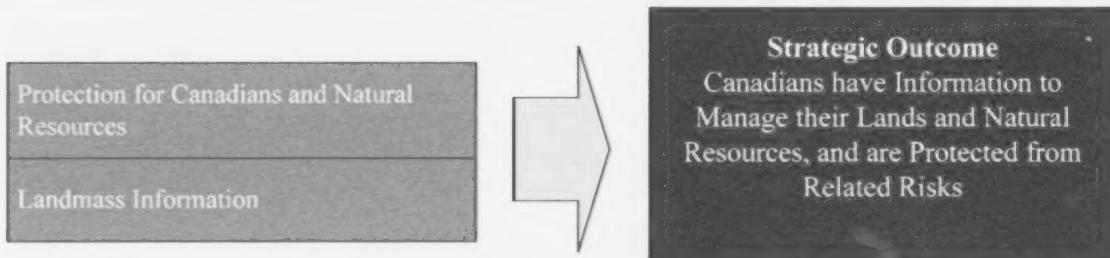
- Advancing the clean-up of historic radioactive wastes in the Port Hope area.
- Supporting the management of Canadian Areas of Concern in the Great Lakes by responding to community-recommended solutions for the clean-up and long-term safe management of historic low-level radioactive waste.
- Improving the knowledge of Canada's aquifers through mapping and assessment to provide knowledge and support improved water management practices.

FSDS Target 7.3 (Sustainable Forest Management) led by NRCan

| FSDS Goal | FSDS Performance Indicator | FSDS Target |
|------------------------|---|---|
| 7 Biological Resources | Number of peer reviewed publications related to forest ecosystems | 7.3 Sustainable Forest Management – Improve the management of Canada's forest ecosystems through the development and dissemination of knowledge |

Strategic Outcome 3:

Canadians have Information to Manage their Lands and Natural Resources, and are Protected from Related Risks



By providing knowledge on Canada's lands and natural resources, NRCan enables informed decision-making, facilitates the responsible development and management of Canada's natural resources and land, and ensures the safety and security of Canadians and the management of risks associated with natural and man-made hazards. This is achieved by:

- Enabling the government, communities and the private sector to reduce the risks from natural and man-made hazards by providing regulation and knowledge, fulfilling legislated responsibilities, and undertaking climate change impacts and adaptation research and analysis to develop a greater understanding of the issues.
- Providing clearly defined legal boundaries to support sovereignty, administration of interprovincial-territorial lands and an effective system of property rights in Canada.
- Providing authoritative geographic infrastructure and fundamental geospatial information on Canada's landmass to support the Canadian public and stakeholders in location-based decision-making.

NRCan's success in achieving this Strategic Outcome will be measured as follows:

| Performance Indicators | Targets |
|--|---|
| Number of new and updated public and private sector adaptation and risk mitigation activities, plans and strategies, such as Natural Resource Management Plans, Adaptation Plans or Emergency Preparedness Plans using NRCan information | 5 activities, plans or strategies by March 31, 2014 |
| Number of national or international interoperable geo-tools and data frameworks that support the management of lands, natural resources, national infrastructure and human populations | 2 (baseline as of 2012-13) by March 31, 2014 |

For more information on NRCan's plans and performance, please see the [NRCan plans and performance reports website⁷⁹](#).

Program 3.1: Protection for Canadians and Natural Resources

Natural resource development, military activities and changes in the environment pose risks to human, natural resource and infrastructure health. Without the appropriate coordination for and knowledge on the management of these risks, the impacts would be severe. The objective of this

program is to enable other government departments, communities and the private sector to manage these risks to human, natural resource and infrastructure. This objective is achieved by providing regulation and knowledge, fulfilling legislated and regulatory responsibilities, and ensuring capacity.

| What NRCan is trying to accomplish and how it measures success | | | |
|---|---|-------------------------------------|--|
| Expected Results | Performance Indicators | Targets | How it works |
| Other government departments, communities, and the private sector manage risks to natural resources, infrastructure, and human health | Number of climate change risk or related assessments completed on natural resources and infrastructure | 4 (annual) | NRCan's programs provide information on climate change adaptation and natural hazards. The use of this information by stakeholders to complete natural resources and infrastructure assessments will allow the Department to assess the effectiveness of its programs. |
| | Number of active collaborations with the public and private sector that manage risks to human population, natural resources and infrastructure health | 3 collaboration agreements (annual) | Multi-jurisdictional discussions are required to manage risks to human health and infrastructure. By assessing the number of collaboration agreements, the Department will be able to measure the potential number of practical adaptation measures being implemented. |

| Financial Resources (\$ thousands) | | | |
|------------------------------------|-----------------------------|-----------------------------|-----------------------------|
| Main Estimates 2013-14 | Planned Spending 2013-14 | Planned Spending 2014-15 | Planned Spending 2015-16 |
| 58,484 | 59,202 | 58,051 | 55,829 |

| Human Resources (FTEs) | | |
|------------------------|---------|---------|
| 2013-14 | 2014-15 | 2015-16 |
| 456 | 448 | 448 |

Planning Highlights

How Canada responds to the changing climate and manages risks from natural and human-induced hazards has a significant impact on the safety and security of Canadians. By developing a greater understanding of hazards such as wildland fire, forest insects and disease pests, earthquakes, volcanic eruptions, landslides, geomagnetic storms, tsunamis and nuclear and radioactive incidents, NRCan facilitates government response in times of crisis. By monitoring and planning

(a)

for natural events and by keeping Canadians informed of long-term mitigation, prevention and adaptation strategies, practical actions can be taken to prepare for and mitigate natural disasters.

Through collaboration with provinces, territories, other government departments, industry and key international partners, NRCan enables discussions on adaptation issues and the preparation of practical adaptation measures. To this end, the development of the Adaptation Platform and associated tools will bring together governments, the private sector and other stakeholders to share information, experience and expertise and to identify risks and opportunities for climate change adaptation, including infrastructure and development planning.

Commitments for 2013-14: Deliver a national climate change Adaptation Platform to support knowledge exchange and tools for climate change adaptation for regions and resource sectors. For the forest sector in particular, develop an adaptation toolkit on sustainable forest management in a changing climate.

Enhance the Canadian Wildland Fire Information System by further developing of the fire Monitoring, Accounting and Reporting System, which will estimate national wildfire burned areas and carbon emissions from fire, and will contribute to knowledge and reporting commitments (national and international) related to forest carbon accounting.

Deliver knowledge and tools to decision makers to mitigate risks and impacts of high-profile forest pest infestations (both native and exotic) in improving understanding of the pathways of exotic species movement, assessing economic and ecological impacts of pest epidemics, and improving predictive models and monitoring systems of pest threats.

Implement tools for the assessment of earthquake risk at regional and national scales and upgrade national- and regional-scale seismic and Global Positioning Systems data to improve real-time earthquake and tsunami alerting.

NRCan also regulates, licenses and inspects the manufacture, storage, sale and possession of explosives and fireworks. These strict controls are necessary to protect Canadians from potential economic and environmental incidents. NRCan also acts as the Certifying Agency for the Canadian Non-Destructive Testing (NDT) Personnel Certification Program. NDT-certified personnel can then conduct inspections and tests on new product quality, equipment condition and infrastructure reliability to help prevent failures in nuclear power, aviation, transportation, oil and gas, and petrochemical plants and anywhere else where public safety or the environment could be significantly impacted.

Commitments for 2013-14: Issue 1700 explosives licences and certifications.

Conduct inspections on explosives safety and security and maintain a level of 70% of inspection reports on explosives that are rated satisfactory or better.

Maintain at 4800 the number of individuals who are certified to perform non-destructive testing to a national standard.

Links with the Federal Sustainable Development Strategy (FSDS)

The activities under Program 3.1 Protection for Canadians and Natural Resources provide support to Theme I (Clean Air) and Theme III (Protecting Nature) of the FSDS. NRCan is working with communities on climate change issues and adaptation and managing threats to ecosystems, including forest invasive species.

Program 3.2: Landmass Information

NRCan provides clearly defined legal boundaries, a robust property system framework, authoritative geographic infrastructure and fundamental geospatial information on Canada's landmass. Without these frameworks, negative impacts will result to the Canadian economy, environment and standard of living. This program delivers Canada's regulatory system for Canada Lands legal surveys, the fundamental geodetic reference system, earth observation and mapping information. Together, these support the Canadian public, other federal departments and levels of government, the private sector and academia to carry out a variety of decisions founded on location-based information, such as land transactions, commercial/industrial development, transportation and logistics. This information enables effective management of Canada's natural resources and lands including opportunities for collaboration across jurisdictions (e.g., cross-border planning, regulatory efficiency), which advances the interests of Canada's natural resource sectors, both domestically and at the international level.

What NRCan is trying to accomplish and how it measures success

| Expected Results | Performance Indicators | Targets | How it works |
|---|--|--|---|
| Public, private sectors and academia use accurate, Government of Canada geo-information for decision-making | Number of public, private sector, governments and academia that use NRCan information for decision-making | 6 large federal departments or agencies (annual), private sector companies or universities | NRCan's programs provide information on Canada's landmass: legal boundaries, property system framework, authoritative geographic infrastructure and fundamental geospatial information. By assessing the number of public, private sector and academic institutions using NRCan landmass information, we will be able to measure the relevance and accessibility of the information produced. |
| | Percentage of clients who are satisfied with Canada's legal boundary framework for effective governance, economic and social development | Positive trend on bi-annual client satisfaction surveys (rotational amongst key client groups: Aboriginal, other government departments, industry) | NRCan's programs impact land use, elections planning, emergency preparedness and response, transportation and real estate. By surveying the Department's client groups – Aboriginal groups, other government departments and industry – the Department will be able to assess |

| What NRCAN is trying to accomplish and how it measures success | | | |
|---|-------------------------------|--|--|
| Expected Results | Performance Indicators | Targets | How it works |
| | | Baseline years ending 2012-13 (annual) | client satisfaction with NRCAN's data. |

| Financial Resources (\$ thousands) | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| Main Estimates 2013-14 | Planned Spending 2013-14 | Planned Spending 2014-15 | Planned Spending 2015-16 |
| 44,500 | 44,500 | 41,888 | 40,712 |

| Human Resources (FTEs) | | |
|-------------------------------|----------------|----------------|
| 2013-14 | 2014-15 | 2015-16 |
| 461 | 459 | 458 |

Planning Highlights



NRCAN provides accurate, location-based data and information used to manage Canada's natural resources and lands. The Department's programs provide authoritative geographic information and support open access to geomatics information such as maps, geodetic reference points and satellite imagery. This information allows for sound decision-making in areas such as land use planning and sustainable resource development. Moreover, opportunities for collaboration across jurisdictions can improve emergency preparedness and response, thereby ensuring the safety and security of Canadians and their land.



NRCAN also conducts surveys to determine the limits of Canada's continental shelf. These data will support Canada's submission to the United Nations Convention on the Law of the Sea by the 2013 deadline. This submission will define the extent of the continental shelf in the Atlantic and Arctic Oceans where Canada may exercise its existing sovereign rights over the exploration of the natural resources of the seabed beyond the customary 200 nautical miles.

Commitments for 2013-14: Acquire, integrate and disseminate geospatial and geoscience information to support land use management and emergency response, including digital mapping and elevation data and S&T publications.

Provide a diversified database of geospatial information, including digital elevation data and critical infrastructure such as power lines.

Provide governments, industries and Canadians with access to up-to-date and archived remote sensing imagery, remote sensing science, methods and value-added products, geodetic reference data and on-line tools for positioning including a modernized Height Reference System for Canada.

Finalize Canada's submission to the United Nations Convention on the Law of the Sea to extend the country's sovereign rights on the Atlantic and Arctic continental margins.

Uncertainties around boundaries can diminish investors' confidence in the property rights system and limit natural resource development. NRCan is fulfilling Canada's obligations for demarcating the boundaries of land claim parcels. The Department conducts boundary surveys of Aboriginal settlement lands, in accordance with Canada's obligations under land claim legislation and treaties. The Department also maintains the Canada-US international boundary.

Commitments for 2013-14: Complete 100% of annual survey obligations as defined in land claim legislation and agreements for northern Canada and for First Nations Land Management and Additions to Reserve in southern Canada.

Finally, NRCan's Polar Continental Shelf Program delivers efficient and cost-effective logistical support to researchers in Canada's North through air and ground transportation, equipment, fuel and accommodations.

Commitments for 2013-14: Complete the expansion of the Polar Continental Shelf Program facility in Resolute in support of the establishment and training program of the Canadian Forces Arctic Training Centre.

Collaborate with Aboriginal Affairs and Northern Development Canada and other partners on the development of the Canadian High Arctic Research Station, including the provision of logistics support.

Program 4.1: Internal Services

This program regroups three areas that assist NRCan in delivering on its mandate and priorities: governance and management support, resource management services, and asset management services. The key to the effectiveness and efficiency of this program is the ability of internal services to adjust and respond to evolving business priorities and requirements. This will allow the Department to better align its priorities with the needs and expectations of Canadians, its activities to its priorities, and its resources to its activities. It will also increase NRCan's capacity to monitor the financial and non-financial performance of its activities and programs.

For 2013-14, NRCan will deliver on its management priority to increase the effectiveness and efficiency of its operations through four guiding principles: asserting policy leadership, mobilizing science and technology, transforming business, and growing human capital. These will ensure that the Department further develops its capacity, responsiveness and resilience to maximize its contribution to the Government of Canada and to Canadians.

Commitments for 2013-14:

Implement the Common Human Resources Business Process Initiative to revitalize human resource services and systems through standardization of processes and tools.

Transform NRCan's web presence into a consolidated, smaller website that will offer Canadians more relevant, useful content and implement stronger governance and scheduled web content reviews.

Implement the NRCAN Values and Ethics Code, the 2012-15 Employment Equity Action Plan, and the 2011-2014 Official Languages Action Plan.

Implement the 2013-14 to 2017-18 Investment Plan to ensure greater alignment of resources with priorities and identified risks, supported by sound governance.

Through NRCAN's Talent Management Strategy, enable all NRCAN employees to maximize their contributions, focusing on leadership development, performance management and targeted learning for managers.

Adopt an enterprise-wide solution for electronic records and document management (GCDocs).

| Financial Resources (\$ thousands) | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| Main Estimates 2013-14 | Planned Spending 2013-14 | Planned Spending 2014-15 | Planned Spending 2015-16 |
| 155,810 | 155,862 | 139,913 | 137,490 |

| Human Resources (FTEs) | | |
|-------------------------------|----------------|----------------|
| 2013-14 | 2014-15 | 2015-16 |
| 1,069 | 1,068 | 1,068 |

Links with the Federal Sustainable Development Strategy (FSDS)

The activities under Program 4.1 Internal services provide support to Theme IV (Shrinking the Environmental Footprint – Beginning with Government) of the FSDS, which outlines targets related to greening government operations. In support of this goal, NRCAN is reducing the greenhouse gas footprint of its operations via the Low Carbon NRCAN Initiative by capitalizing on the Department's energy technology research and development, increasing awareness of energy efficiency, reducing financial and policy barriers, and implementing specific activities such as optimizing building operations and maintenance.

Section III: Supplementary Information

Financial Highlights

The highlights presented in this section are intended to serve as a general overview of NRCan's operations. Future-oriented financial statements are prepared on an accrual basis and the intent is to strengthen accountability and improve transparency.

The variances between the figures presented in this section and the planned spending amounts provided in other sections of the RPP are the result of the exclusion of items such as non-respendable revenues, services without charge received from other government departments, amortization, and adjustments to liabilities (environmental liabilities, vacation pay, compensatory leave and employee future benefits). Also, statutory payments related to the employer's portion of the Employee Benefit Plan are included in the following figures, but not in the planned spending.

Future-Oriented Condensed Statement of Operations and Departmental Net Financial Position

For the year ended March 31

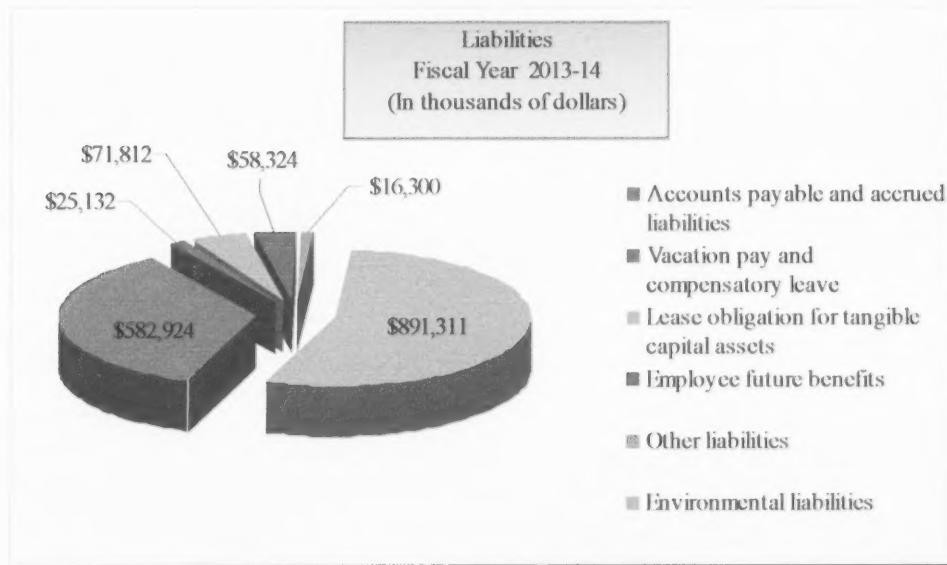
(\$ millions)

| | \$ Change | Forecast 2013-14 | Estimated Results 2012-13* |
|---|------------------|-------------------------|---------------------------------------|
| Total Expenses | 534 | 2,764 | 2,230 |
| Total Revenues | 3 | 36 | 33 |
| Net Cost of operations before government funding and transfers | 531 | 2,728 | 2,197 |
| Departmental net financial position | (155) | (851) | (1,006) |

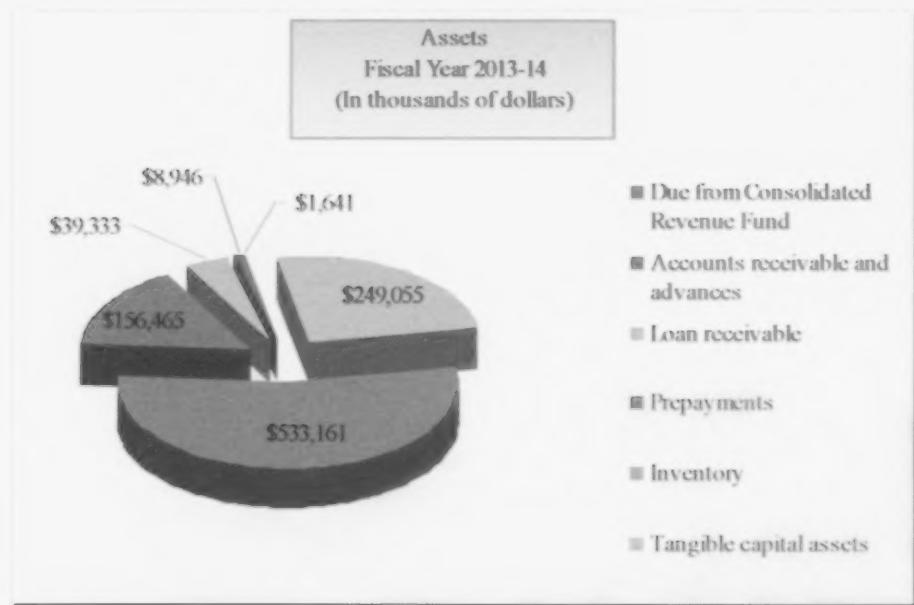
**Future-Oriented Condensed Statement of Financial Position
For the Year ended March 31
(\$ millions)**

| | \$ Change | Forecast 2013-14 | Estimated Results 2012-13 |
|--|-----------|------------------|------------------------------|
| Total net liabilities | (9) | 1,646 | 1,655 |
| Total net financial assets | 132 | 536 | 404 |
| Departmental net debt | (141) | 1,110 | 1,251 |
| Total non-financial assets | 14 | 259 | 245 |
| Departmental net financial position | (155) | (851) | (1,006) |

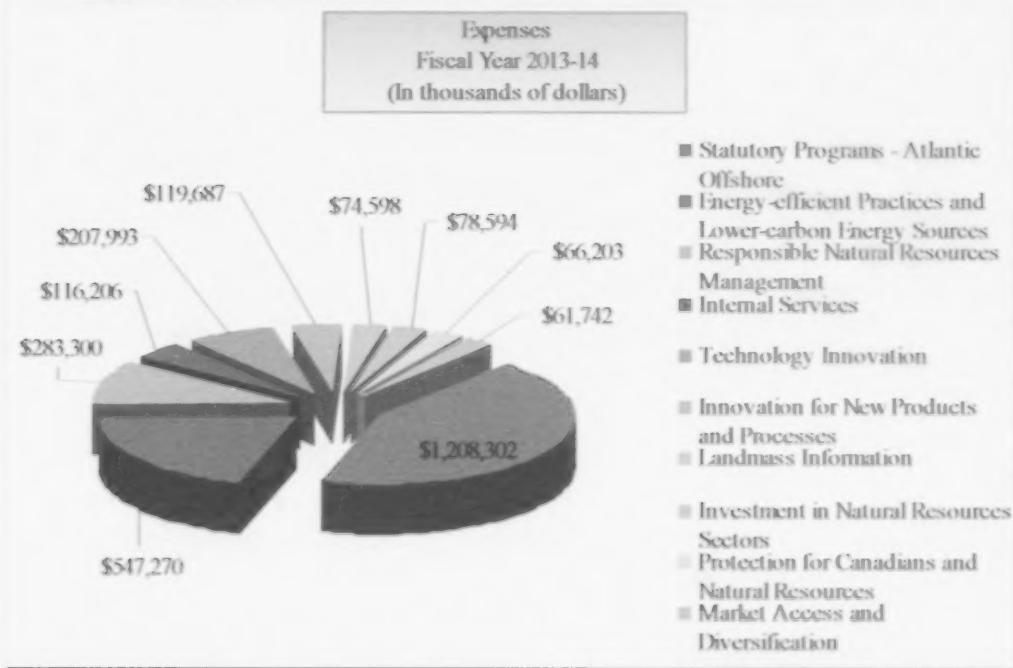
Liabilities-The chart below presents NRCan's projected liabilities at the end of 2013-14.



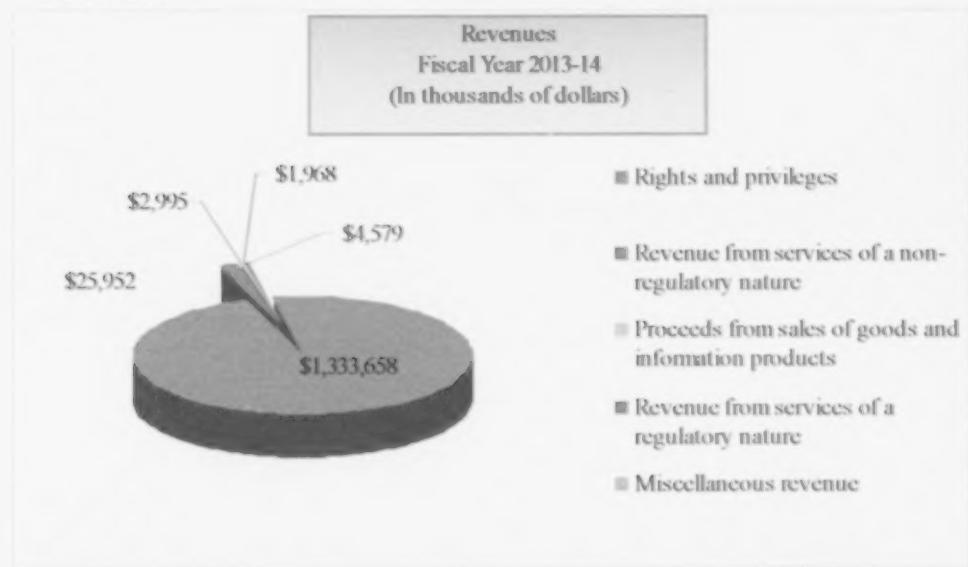
Assets-The chart below presents NRCan's projected assets at the end of 2013-14.



Expenses-The chart below presents the distribution by program activity of NRCan's total projected expenses for 2013-14.



Revenues-The chart below presents the distribution of NRCan's total projected revenues for 2013-14.



NRCan financial statements are available on the [NRCan website⁸⁰](#).

Future-Oriented Financial Statements

The complete Future-Oriented Financial Statements are available on the [NRCAN website⁸¹](#).

List of Supplementary Information Tables

All electronic supplementary information tables listed in the 2013-14 Report on Plans and Priorities can be found on the [NRCAN website⁸²](#).

- ▶ Details on Transfer Payment Programs;
- ▶ Disclosure of TPPs under \$5 million;
- ▶ Greening Government Operations;
- ▶ Horizontal Initiatives;
- ▶ Sources of Respondable and Non-Respondable Revenue;
- ▶ Summary of Capital Spending by Program;
- ▶ Up-Front Multi-Year Funding; and
- ▶ Upcoming Internal Audits and Evaluations over the next three fiscal years.

Tax Expenditures and Evaluations Report

The tax system can be used to achieve public policy objectives through the application of special measures such as low tax rates, exemptions, deductions, deferrals and credits. The Department of Finance publishes cost estimates and projections for these measures annually in the [*Tax Expenditures and Evaluations*](#) publication. The tax measures presented in the *Tax Expenditures and Evaluations* publication are the sole responsibility of the Minister of Finance.

For more information on the Tax Expenditures and Evaluations Report, please see the [Department of Finance website⁸³](#).

Section IV: Other Items of Interest

Organizational Contact Information

Jennifer Hollington, Director General

NRCan's Plans and Performance Reports Website

NRCan has developed a plans and performance reports website, which presents the Department's plans and performance by fiscal year and presents linkages with the Federal Sustainable Development Strategy and the Clean Air Agenda. For more information, please visit the [NRCan plans and performance reports website⁸⁴](#).

Endnotes

¹ <http://www.nrcan.gc.ca/acts-regulations/332>

² <http://laws-lois.justice.gc.ca/eng/acts/N-20.8/>

³ <http://laws-lois.justice.gc.ca/eng/acts/R-7/>

4 <http://laws-lois.justice.gc.ca/eng/acts/F-30/>5 <http://www.nrcan.gc.ca/portfolio/573>6 <http://www.accl.ca/Home.htm>7 <http://www.neb-one.gc.ca/clf-nsi/index.html>8 <http://www.cnsc-ccsn.gc.ca/eng/>9 <http://www.cnlopb.nl.ca/>10 <http://www.cnsopt.ns.ca/>11 <http://npa.gc.ca>12 <http://www.sdtc.ca/>13 <http://www.appointments-nominations.gc.ca/prflOrg.asp?OrgID=ESR&type-typ=3&lang=eng>

¹⁴ Type is defined as follows: **previously committed to**—committed to in the first or second fiscal year before the subject year of the report; **ongoing**—committed to at least three fiscal years before the subject year of the report; and **new**—newly committed to in the reporting year of the RPP or DPR.

15 <http://www.tbs-sct.gc.ca/ppg-cpr/frame-cadre-eng.aspx>16 <http://www.tbs-sct.gc.ca/ppg-cpr/frame-cadre-eng.aspx>17 <http://www.tbs-sct.gc.ca/ppg-cpr/frame-cadre-eng.aspx>18 www.nrcan.gc.ca/plans-performance-reports/home19 <http://cfs.nrcan.gc.ca/pages/231>20 <http://www.nrcan.gc.ca/energy/science/1335>21 <http://www.nrcan.gc.ca/energy/sources/uranium-nuclear/1245>22 <http://www.mpmo-bgep.gc.ca/index-eng.php>23 <http://oec.nrcan.gc.ca/transportation/alternative-fuels/programs/10163>24 <http://www.nrcan.gc.ca/audit/reports/2012/6382>25 <http://www.nrcan.gc.ca/earth-sciences/about/organization/organization-structure/geological-survey-of-canada/8335>26 http://www.nuclearlegacyprogram.ca/en/home_en.html27 <http://www.nrcan.gc.ca/energy/science/programs-funding/1482>28 <http://www.nrcan.gc.ca/energy/science/2003>29 <http://oec.nrcan.gc.ca/corporate/14511>30 <http://oec.nrcan.gc.ca/transportation/alternative-fuels/programs/8251>31 <http://phai.ca/en/>32 <http://www.nrcan.gc.ca/earth-sciences/about/current-program/geomapping/7131>33 <http://www.nrcan.gc.ca/energy/science/programs-funding/1482>34 <http://oec.nrcan.gc.ca/transportation/alternative-fuels/programs/10163>35 <http://oec.nrcan.gc.ca/transportation/alternative-fuels/programs/8251>36 <http://www.nrcan.gc.ca/media-room/news-release/16a/2009-03/1636>37 <http://www.nrcan.gc.ca/energy/science/programs-funding/1603>38 <http://www.nrcan.gc.ca/energy/science/2003>39 http://www.nuclearlegacyprogram.ca/en/home_en.html40 <http://cfs.nrcan.gc.ca/pages/232>41 <http://phai.ca/en/>42 <http://cfs.nrcan.gc.ca/pages/379>43 <http://www.nrcan.gc.ca/earth-sciences/products-services/satellite-photography-imagery/satellite-facilities/2348>44 <http://www.nrcan.gc.ca/media-room/news-release/2012/6329>45 <http://www.mpmo-bgep.gc.ca/index-eng.php>46 http://www.nuclearlegacyprogram.ca/en/home_en.html47 <http://cfs.nrcan.gc.ca/pages/232>48 <http://www.nrcan.gc.ca/energy/science/programs-funding/1482>49 <http://oec.nrcan.gc.ca/transportation/alternative-fuels/programs/10163>

- ⁵⁰ <http://oec.nrcan.gc.ca/transportation/alternative-fuels/programs/8251>
- ⁵¹ <http://www.nrcan.gc.ca/earth-sciences/products-services/satellite-photography-imagery/satellite-facilities/2348>
- ⁵² <http://www.nrcan.gc.ca/audit/reports/2012/6382>
- ⁵³ <http://www.nrcan.gc.ca/media-room/news-release/2012/6329>
- ⁵⁴ <http://www.nrcan.gc.ca/science/story/3680>
- ⁵⁵ <http://www.nrcan.gc.ca/energy/science/programs-funding/1603>
- ⁵⁶ <http://cfs.nrcan.gc.ca/pages/379>
- ⁵⁷ <http://phai.ca/en/>
- ⁵⁸ <http://www.sdtc.ca/index.php?page=about-our-funds>
- ⁵⁹ <http://www.nrcan.gc.ca/energy/science/programs-funding/1482>
- ⁶⁰ <http://oec.nrcan.gc.ca/transportation/alternative-fuels/programs/8251>
- ⁶¹ <http://www.nrcan.gc.ca/earth-sciences/products-services/satellite-photography-imagery/satellite-facilities/2348>
- ⁶² <http://www.mpmo-bggp.gc.ca/index-eng.php>
- ⁶³ <http://www.nrcan.gc.ca/science/story/3680>
- ⁶⁴ <http://oec.nrcan.gc.ca/transportation/alternative-fuels/programs/10163>
- ⁶⁵ <http://www.nrcan.gc.ca/energy/science/2003>
- ⁶⁶ <http://www.sdtc.ca/index.php?page=about-our-funds>
- ⁶⁷ <http://www.nrcan.gc.ca/plans-performance-reports/53>
- ⁶⁸ <http://www.nrcan.gc.ca/earth-sciences/about/organization/organization-structure/climate-change-impacts-adaptation-division/283>
- ⁶⁹ <http://phai.ca/en/>
- ⁷⁰ <http://www.tbs-set.gc.ca/cms-sdg/esp-pbc/me-bpd-cng.asp>
- ⁷¹ <http://laws-lois.justice.gc.ca/eng/acts/F-8.6/page-1.html>
- ⁷² <http://www.climatechange.gc.ca/dialogue/default.asp?lang=En&n=E47AAD1C-1>
- ⁷³ <http://www.nrcan.gc.ca/plans-performance-reports/sustainable-development-strategy/103>
- ⁷⁴ <http://www.ec.gc.ca/dd-sd/>
- ⁷⁵ <http://www.nrcan.gc.ca/publications/home/87>
- ⁷⁶ <http://www.nrcan.gc.ca/plans-performance-reports/home>
- ⁷⁷ <http://www.nrcan.gc.ca/plans-performance-reports/home>
- ⁷⁸ <http://www.nrcan.gc.ca/plans-performance-reports/home>
- ⁷⁹ <http://www.nrcan.gc.ca/plans-performance-reports/home>
- ⁸⁰ <http://www.nrcan.gc.ca/reports-plans-priorities/home>
- ⁸¹ <http://www.nrcan.gc.ca/reports-plans-priorities/home>
- ⁸² <http://www.nrcan.gc.ca/reports-plans-priorities/home>
- ⁸³ <http://www.fin.gc.ca/purl/taxexp-eng.asp>
- ⁸⁴ <http://www.nrcan.gc.ca/plans-performance-reports/home>